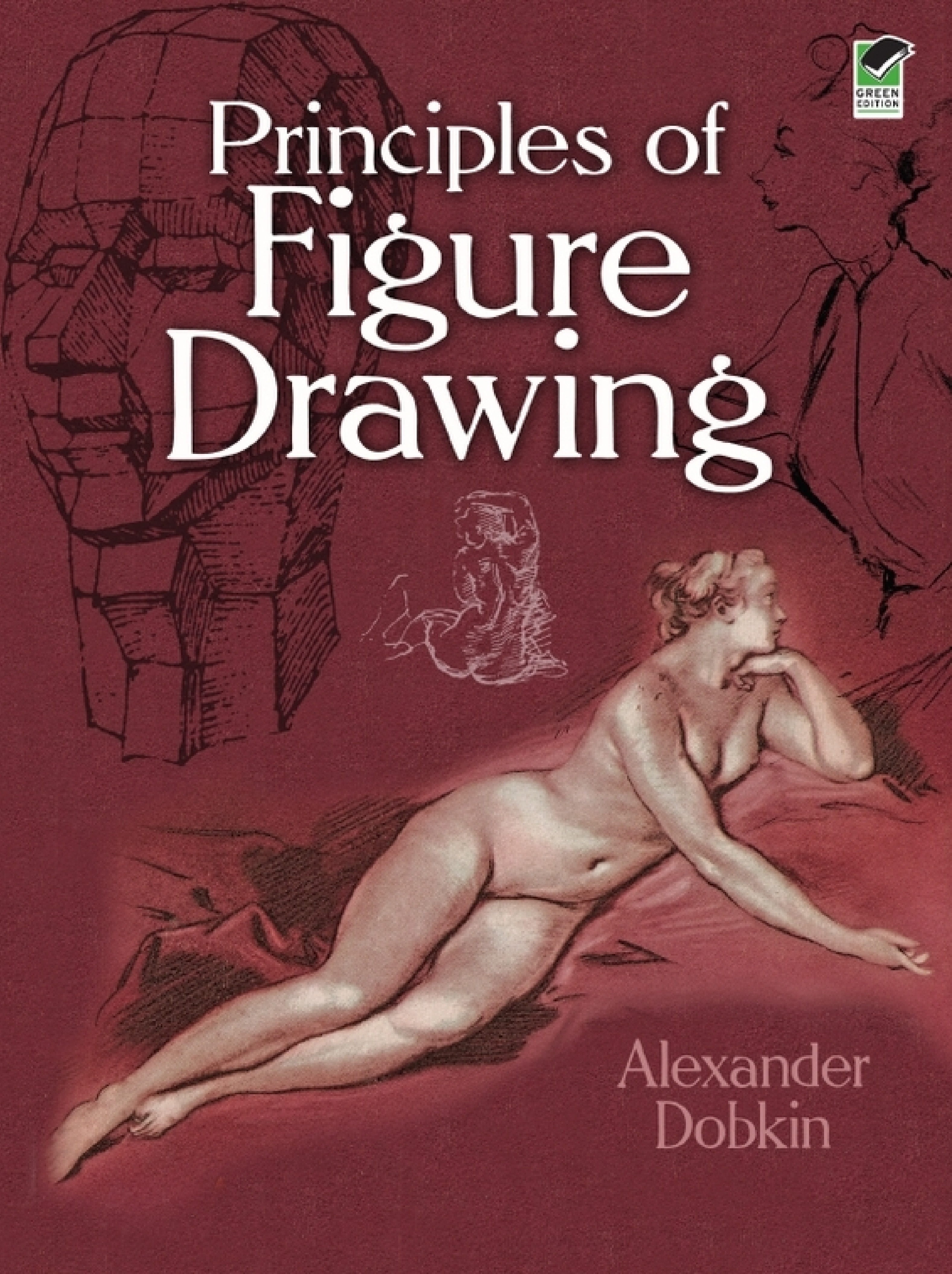
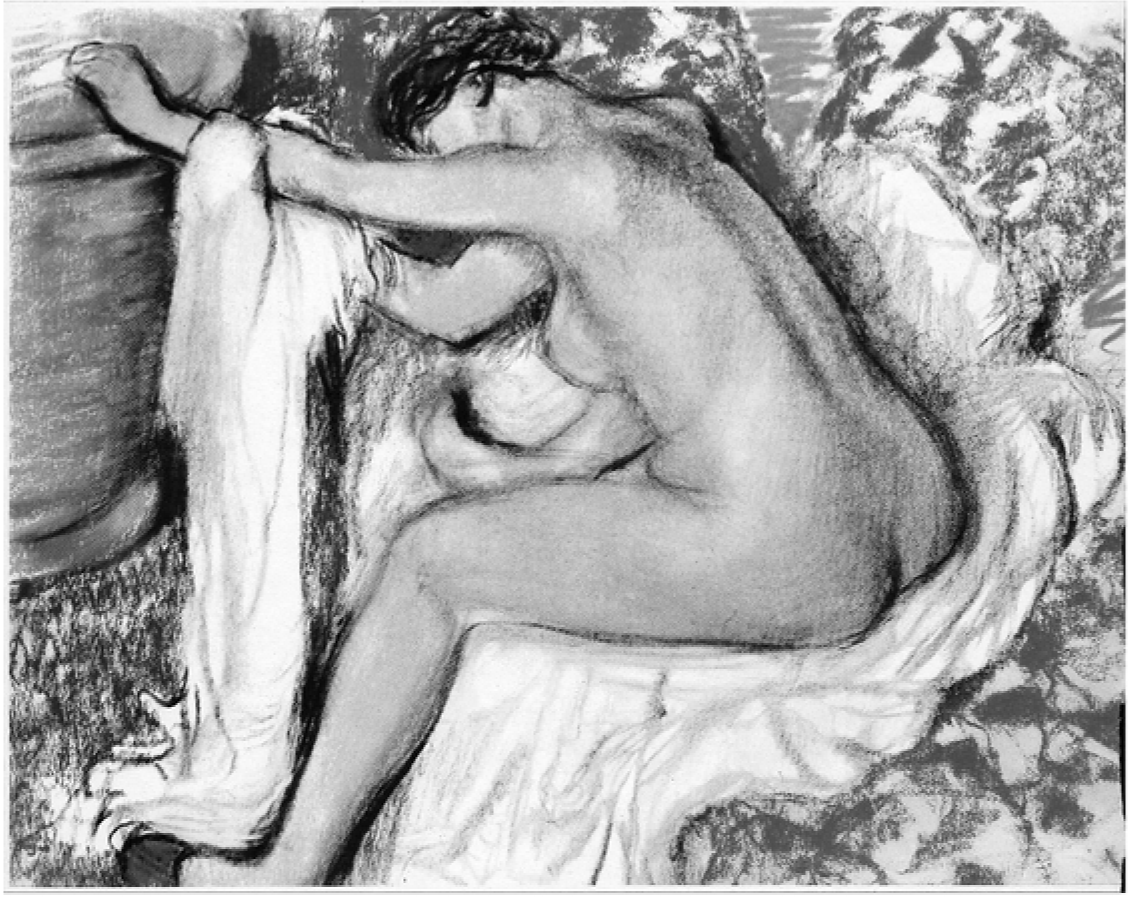
Principles of Figure Drawing



Alexander Dobkin



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Principles of
Figure Drawing

Alexander Dobkin

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TO KIKI

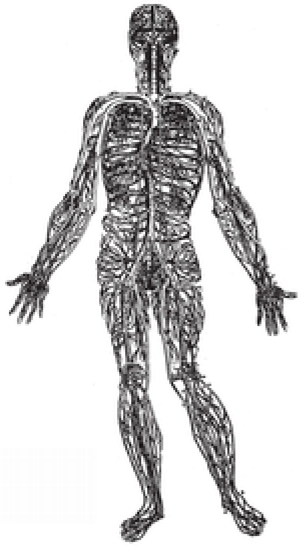
Table of Contents

Title Page
Copyright Page
Dedication
Epigraph
Introduction
Proportions
Bone Structure
Muscles OF THE TORSO
The Limbs
Head and Neck
Differences BETWEEN MALE AND FEMALE
Action and Motion
Methods OF DRAWING
Mediums
The Draped Figure
Conclusion
ACKNOWLEDGMENTS
INDEX OF ARTISTS
A CATALOG OF SELECTED DOVER BOOKS IN ALL FIELDS OF INTEREST

“The highest object for art is man.”

—MICHELANGELO.

Introduction



FROM VESALIUS

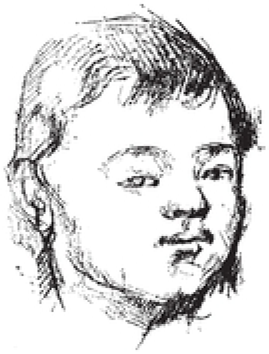
IN THE following pages I have given some basic information necessary for good figure drawing, information gathered from years of experience as a teacher and artist. As an artist, I know that there are no short cuts to learning how to draw, and therefore, as a teacher, I have never believed in devising a simplified method of drawing that could be taught to anyone with the intention of producing speedy results. Learning by memorizing a few tricks may be the quickest way of knocking off a picture, but after working in this manner for a while, the student soon finds himself in a blind alley, unable to go ahead. The rules he once thought helpful soon become burdensome and stultifying. What he found easy to learn he now finds much harder to unlearn. For one thing is certain. Rules are easier to acquire than to forget. That is why I have avoided any pet theories in this book. Instead, I have enlarged upon the answers to the problems that so many of my students encountered in drawing a figure, answers that seem to have helped them to move ahead and develop.

We learn by doing, observing, and contact. We learn by doing when we pick up a pencil and draw, improving the image as we develop our ability and technique. We learn by observing when we get into the habit of looking at things about us, and find them stimulating and exciting enough to record. We learn through contact when we begin to enjoy looking at and understanding works of art. An informative book on drawing can be of great help to us, not only through its written material, but particularly through its collection of pictures, for words without illustrations are of little practical value in learning how to draw.

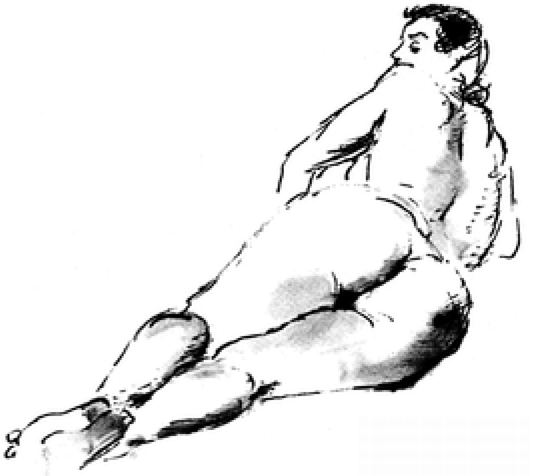
This book contains diagrams explaining the text, and many reproductions of some of the world's greatest masterpieces, both old and modern. The reader should look at them often and, in addition, develop the habit of collecting more art books and reproductions, and frequenting the art museums, galleries, and libraries. In most cases, these will be the best available means of learning how to draw.

Since the construction of the human body is complicated and difficult to comprehend all at once, I have thought it best to present it in several parts. Nevertheless, a figure must be studied in its entirety. Knowing how to draw a cage, a pelvis, or a leg means very little unless the student learns not only to draw them separately, but also to unite them to form an organic whole. A machine is good only when one can make it work, and to make it work all parts are essential. More than that, each part must fit and relate to the others, finding its proper place within the complete framework. One's concept of a human figure should be a picture of a complete body, despite the fact that, while learning, it may be convenient for us to break it up into parts. As one studies a head, for example, one should try at the same time to visualize it upon its neck and in its relationship to the entire skeleton in terms of proportions and functions. Never go too deeply into the study of a torso, for instance, without trying to place it firmly on its legs. It must be seen as one part of the entire human machine, contributing to, as well as being dependent upon, the rest of the body. Proportions, balance, and equilibrium should never be studied without having the entire figure in mind, for these terms imply relationships and become meaningless as isolated concepts.

There are two reasons why I have collected drawings by many different masters. First, to show that each master's work is personal and different and great in its own way. Instead of narrowing our view by copying one man's s work, we should learn from as many artists as possible, taking what each has to offer and using whatever we think necessary for our own development—not copying their work slavishly, but rather absorbing what they can teach us as we develop our own style.



CÉZANNE



RAPHAEL SOYER

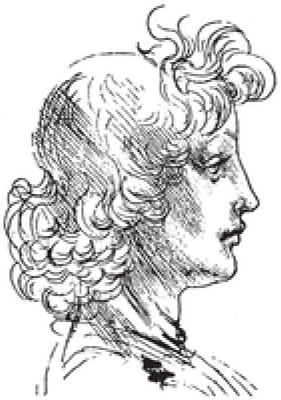
Second, it is obvious that almost every master preferred to express himself by developing a particular medium of his own. For example, who has been able to handle pastels as well as Degas? Although many masters were able to express themselves well with many tools, yet most of them seem to have favored one particular medium. Naturally then, we find the best examples of every medium only when we are willing to look at the work of many artists.

“But,” one might ask, “what has the medium to do with figure drawing? And why should it be included in this book?”

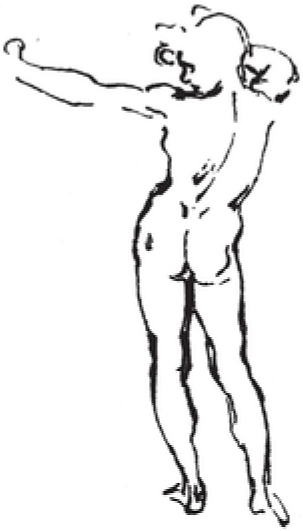
The answer is this: From my experience I have observed that very often what a pupil could not do with a pen, he was well able to do with a pencil. On the surface, a preference for the pencil may seem unreasonable. That is why some teachers meet this problem by forcing the pupil to use a pen. But if that is done, it is the teacher’s, not the pupil’s, action that is unreasonable for it is quite natural for some people to feel more confident when handling a tool they know how to use. An unsympathetic attitude on the part of a teacher will never foster a love for drawing in a student; it will create an even greater antagonism toward the pen.

The preference for a particular instrument is not stubbornness but the expression of a fundamental need. I have observed that even mechanics are partial to one particular hammer. Such preferences are common. They are due to the familiarity acquired through the constant and successful use of a tool. The Chinese, for example, draw best with a brush because that is the tool they also write with. Finally, some tools are more “sympathetic” to one’s nature than others.

Nevertheless, I should certainly encourage every student to use more than one medium. For it may be merely his fear of trying something new that prevents him from developing facility with many graphic tools. Very often, doing exactly what I have done in this book, that is, showing various examples of art, is enough to stimulate and encourage this type of student to work in many mediums rather than one.



LEONARDO



LEONARDO

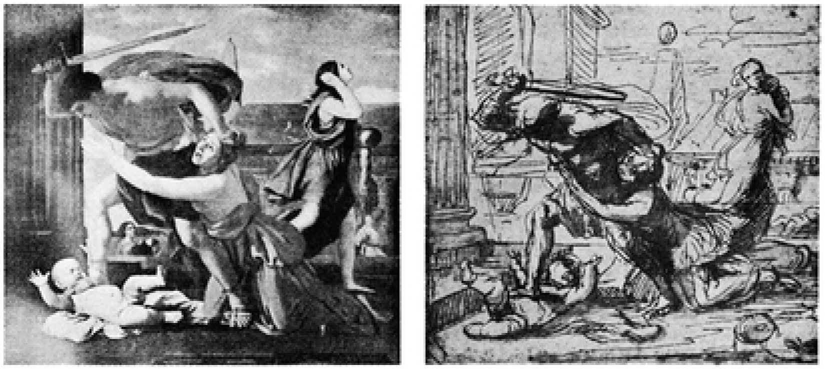
Today, teaching the actual structure of man —the skeleton, and the muscles—is considered by some to be outmoded and old-fashioned, something outside the sphere of creative art. For years now, many teachers have been developing a theory that one should draw a human being as one would an apple or a vase, purely from the point of view of composition and design. No wonder that as a result of this kind of thinking and teaching many artists, well-known in the field, draw the figure ineptly and unconvincingly.

It is true that the reason for painting has always been composition and design, and not merely a photographic representation of an object. Still, it does not follow that, like an inanimate vase, a man in art is merely a sum total of straight lines, curves, and patterns. If we are to capture the full dignity of the human being, if we are to invest him with humanity as did Daumier and Rembrandt, we can no longer accept the prevailing thesis that cubes and cylinders make a man. This kind of anti-humanist philosophy was strongly adhered to by the famous critic Roger Fry, who analyzed Cézanne and other great masters from this point of view. But in art, as in other fields of human activity, lesser men are readily given to quoting great men in defense of their own shortcomings. Hence, Cézanne's observation that all natural forms could be reduced to a cube, a sphere, or a cylinder has often been interpreted to mean that an artist can function without the study or observation of nature—that art is independent of nature. Actually, however, neither Cézanne nor anyone in his circle of friends, artists such as Pissarro, Degas, or Renoir, has ever departed from nature. On the contrary, their observation of all natural forms, be it a figure, a landscape, or a still life, was unusually keen and profound. Their canvases reflect their warmth and deep feeling for humanity.

Nor is it true that Cézanne's works are remarkable exercises in pure form only, that his people are impersonal. His portraits of peasants, his wife, and his friends are always credible personalities whose faces and attitudes are never contrived or artificial.

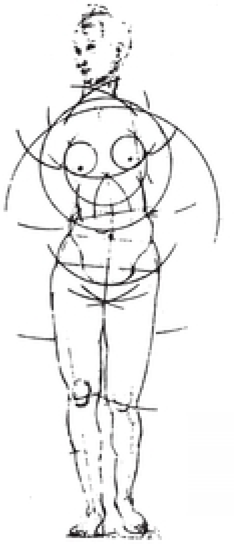
Drawing, the most intimate expression of an artist, is closest to nature. It represents his immediate reaction to natural forms. It is, in a sense, more revealing than painting, for like the first draft of a personal letter, it is his first uninhibited statement. The second draft and, finally, a painting from that sketch become much more objective. What a canvas has lost, a sketch frequently retains. It retains the spontaneity and sensitivity so often impossible to hold as an exciting idea progresses from an instant reaction to a more placid and well-digested statement. No one realizes this more than the artist himself. In the words of Redon: "It is not the ambitious study that the artist will consult when he needs reliable help. The naive study, when one forgets what one *knows* and approaches what one sees with humility, remains a real document, fruitful, inexhaustible in its lessons, and one that will never tire."

Learning to draw is closely linked with our ability to see and interpret our environment. Great art has always concerned itself with human activity. Art detached from nature can never inspire or stimulate the growth of ideas. Like a fallen branch of a tree, it is doomed to sterility and death. Escape from life has never been the solution of an artist’s problems. A man in an ivory tower, isolated and away from life, is creatively a dead man. Such a man can never become an artist.



POUSSIN. Immediately evident is the difference in approach between drawing and canvas. By comparison the canvas is very formal indeed, while the drawing is full of life and spontaneity.

Proportions



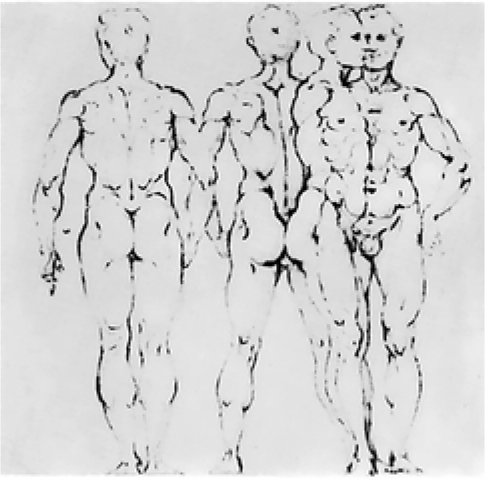
DÜRER

IN LIFE the human figure is usually from 6½ to 7 head-lengths tall. Yet in art it may be anywhere from 4. to 12 head-lengths, varying in size according to the demands made upon it. If the artist is concerned primarily with the muscles of the body, the head will tend to become small in proportion. If, on the other hand, the features and the expression of the face are important, the figure will tend to be smaller.

A child, with his limited experience, will often draw a face and practically ignore the body and the limbs. Such also is the tendency among primitives. In some civilizations certain proportions become traditional and remain intact, with but few variations, for thousands of years. When compared with the extreme variety in design and proportion of European figures, the Egyptian concept of the human form seems to have remained quite static for three thousand years.

Leonardo da Vinci and Michelangelo were not only outstanding artists but profound scientists as well. They approached the structure of man as a science, making their own dissections, drawing what they saw, and refusing to accept any notions without being convinced by seeing, studying, and drawing from nature. Hence, in their work, the enlarging and elongation of the body at the expense of the size of the head can be explained partly by the desire to display their extensive knowledge of muscles and bones. The figure grew in length until El Greco often made it 12 head-lengths tall. To endow his men and women with godlike proportions, Michelangelo built figures that were gigantic and completely out of scale with a real human being.

Like Leonardo in Italy, Dürer in Germany was a scientifically-curious artist. He, like Leonardo, was a product of the Renaissance, which was rapidly moving north. He lived in a period that was truly the rebirth, or rather the dawn, of man’s freedom, of his recognition of his powers to create his own environment, and of his abilities to harness nature and make it work for him. It was the dawn of experimental science and research, the awakening of greater interest in the material world. It was the beginning of the struggle of human knowledge against the superstitions and taboos piled up. by ages of darkness and slavery.



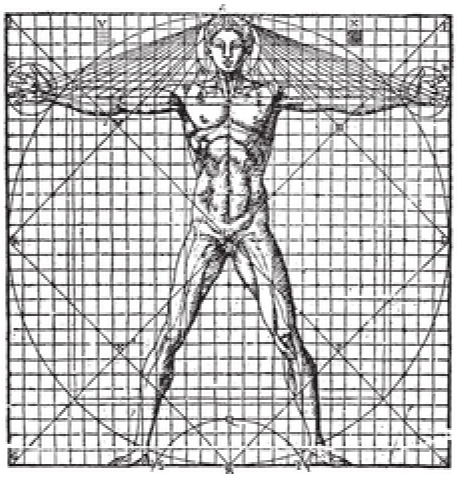
LEONARDO

The importance of man was the credo of the times. His body was no longer held in contempt, a mere mortal shell containing an immortal soul. He assumed the new dignity and power so discernible in all the art of the Renaissance. “The highest object for art is man,” said Michelangelo. Looking at his frescoes in the Sistine Chapel, who could doubt it?

When “the highest object for art is man,” man naturally becomes the highest object of research also. For no artist can paint two hundred figures, many larger than life-size, in a single continuous mural, as Michelangelo did in *The Last Judgment* without a thorough knowledge of the human being.

No wonder then that some of the most original and amazing treatises on the human body were written and illustrated by these artists. Leonardo filled pages and pages of his famous notebook with detailed drawings of all sorts of anatomical details, constructions, and proportions of the human machine carefully and minutely described.

In the North, Dürer was preoccupied with the same problem. His two volumes, *Human Proportions*, originally conceived as a treatise to run to four volumes, was published as he lay on his deathbed.



RENAISSANCE ITALIAN ARTIST

It is significant that no great mural painting has been done without this “highest object for art.” Landscapes, flowers, and abstract designs can never capture the imagination nor constitute the necessary drama so essential to mural painting. Nothing is more exciting than a painting of man as the protagonist in a dramatic situation. For nothing is more important to us than ourselves. Whatever detours art history may take, one thing is certain—in the end man always emerges as the most important object in art.

Today the world is much smaller. Art of all kinds, from all places and times, travels rapidly, making artists aware that beauty scorns narrow standards. Today, more than ever before, a good artist represents the sum total of world-wide influences. Hence proportions become a matter of personal choice.

Often, however, figures are made taller or smaller because of the function they serve. Fashion artists prefer an abnormally tall figure that can perform the task of displaying clothes to the fullest advantage. In many cases the fashion figure is at least 8 or 9 head-lengths tall.

Regardless of the size of the figure, certain proportions remain constant. The center of the body falls just above the crotch, at the point called the pubis. After starting a drawing, one should be able to see at a glance whether or not the whole figure can be made to fit into the given space. All one has to do is to measure off the distance from the top of the head to the pubis and double it.

Do not measure off proportions with a ruler. Do it approximately, by sight, or with something less accurate than a measuring rod, and then only when you feel there is something wrong with the results of your freehand work. The essence of good drawing is freedom and spontaneity. Avoid becoming a slave to rules.

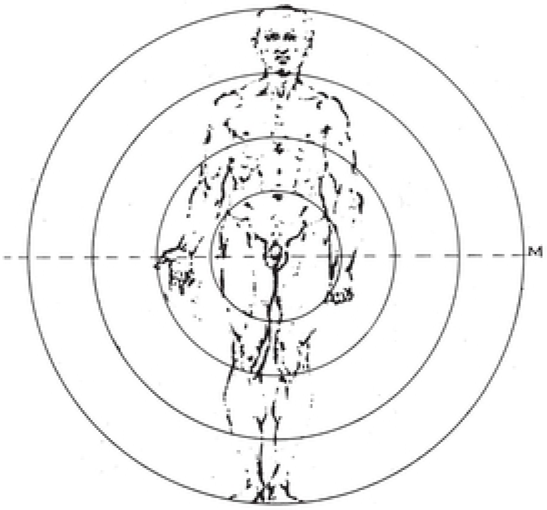


Fig. 1

Leonardo da Vinci makes his man 8 head-lengths tall with four concentric circles, each circle being one head-length apart. Whether artists make their figures 8, 9, or 12 head-lengths, the proportions remain constant—the middle always falls in the same place, and the arms, legs, and hands maintain the same proportional relationship with the body.

Study anatomy carefully, but when drawing a figure never use precision instruments of any kind. Just being aware of certain proportions will help you to draw them naturally. Remember that all the masters have created their own proportions in their work. Not one of them has ever followed all the rules slavishly. Every artist of standing has evolved his own theories from long study and observation.

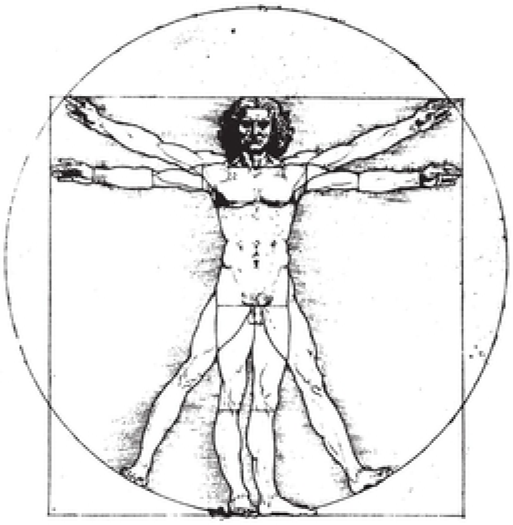
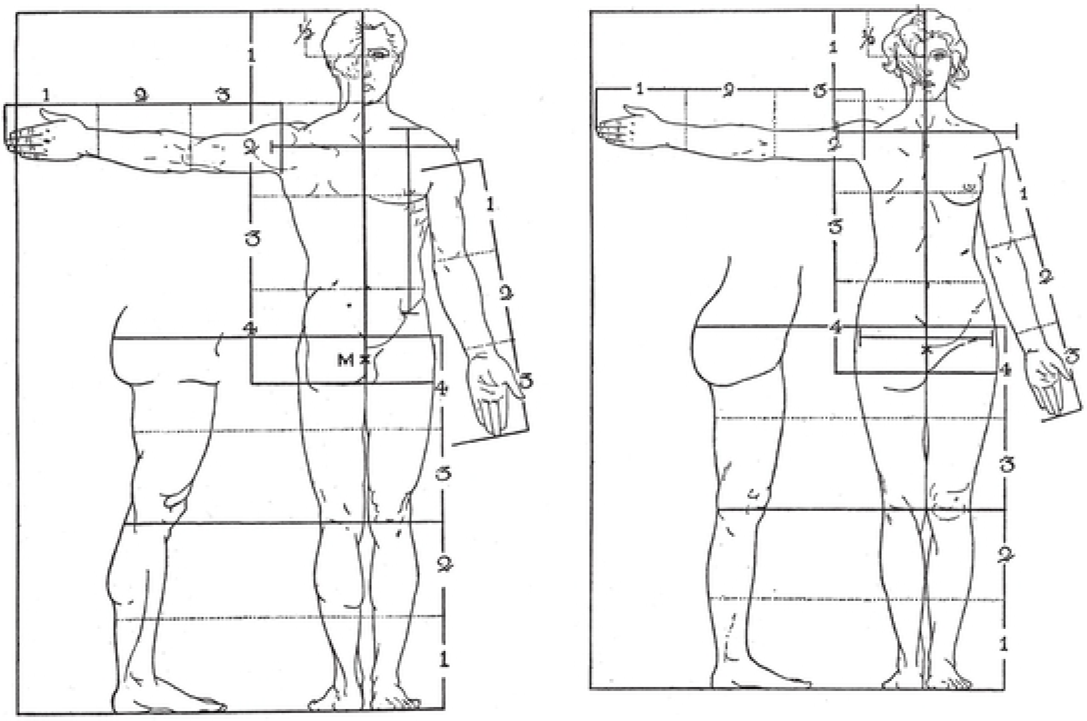


Fig. 2

Leonardo da Vinci said “the span of a man’s outstretched arms is equal to his height. If a circle [with navel as center] be described of a man lying with his face upward and his hands and feet extended, it will touch his fingers and his toes.” Dürer does the same thing (p. 17). And although the Renaissance Italian artist (p. 14) puts his figure in a square, he describes his circle with the pubis as a center.

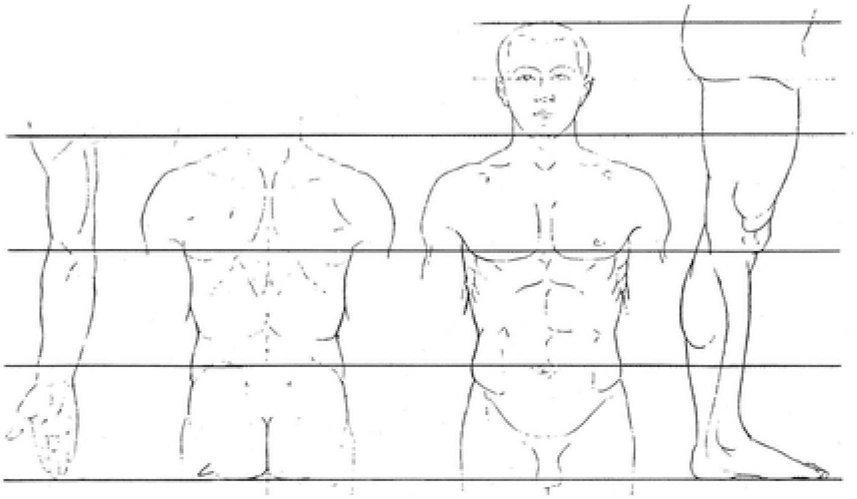


Figs. 3 and *Figs. 4*

From Richer. The divisions indicate head-lengths. M marks the middle of the body. The figure is 7½ heads tall, arms 3½, legs 4, hands a little less than a head. The eyes fall at the halfway mark of the head.

Fig. 5

The parts of the body that measure 1, 2,3, and 4 head-lengths. Arm 3 lengths; cage 2; torso 3; pelvis 1; the entire leg 4. The bottom of the knee indicates a halfway point on the leg.



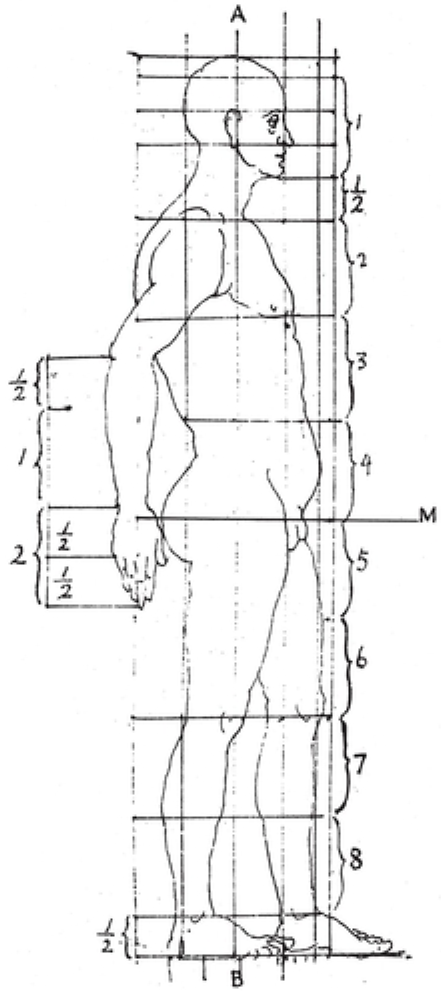
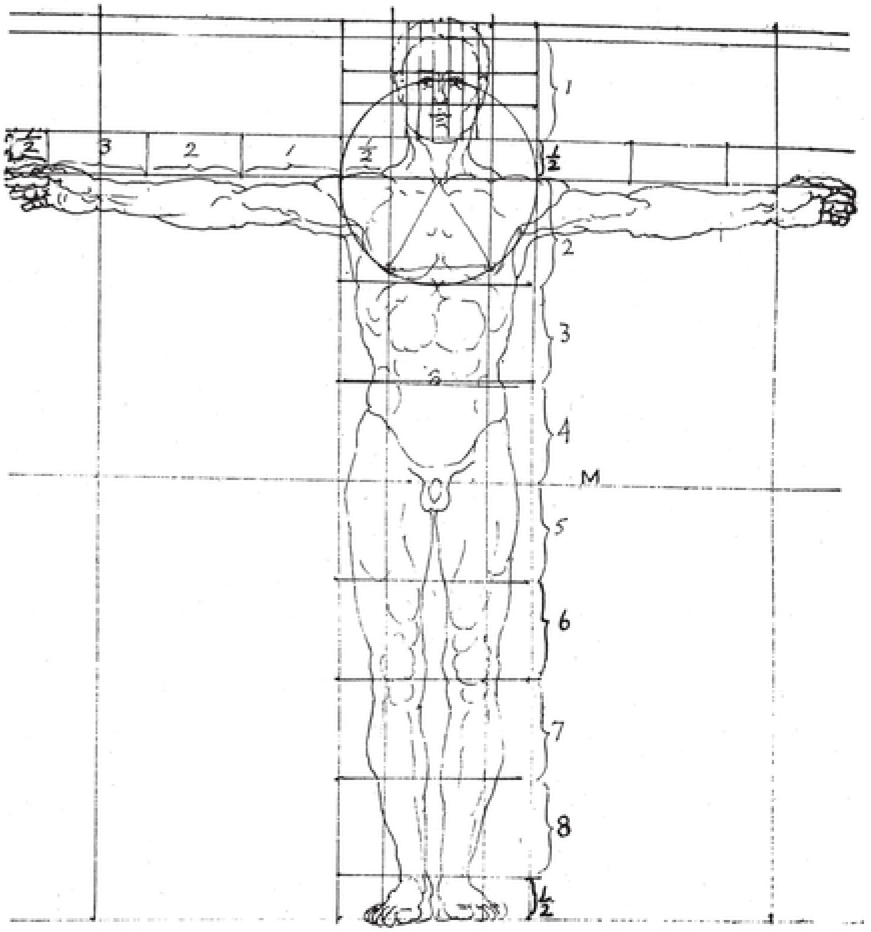

A
1
1/2
2
3
1/2
1
4
M
2
1/2
1/2
5
6
7
8
1/2
B

Fig. 6
Dürer, in this drawing, makes his man 9 face-lengths tall, allowing a half face-length for the neck and feet. The arm from the elbow down, including the hand, is 3½ head-lengths; the neck ½; and hand 1.


1/2
3
2
1
1/2
1
1/2
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3
4
M
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8
1/2

Fig. 7
Dürer. This is divided in the same manner, but Dürer adds a circle whose circumference passes through the eyes and nipples and whose center is the point where the collarbones originate.

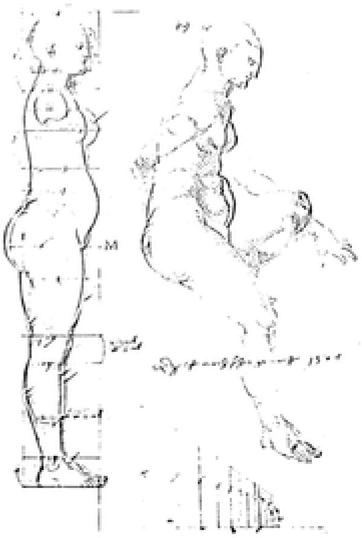
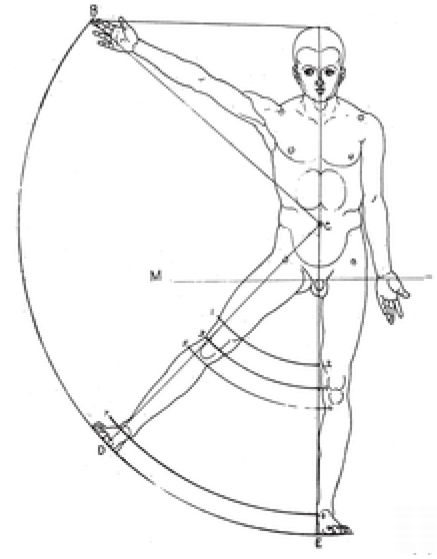


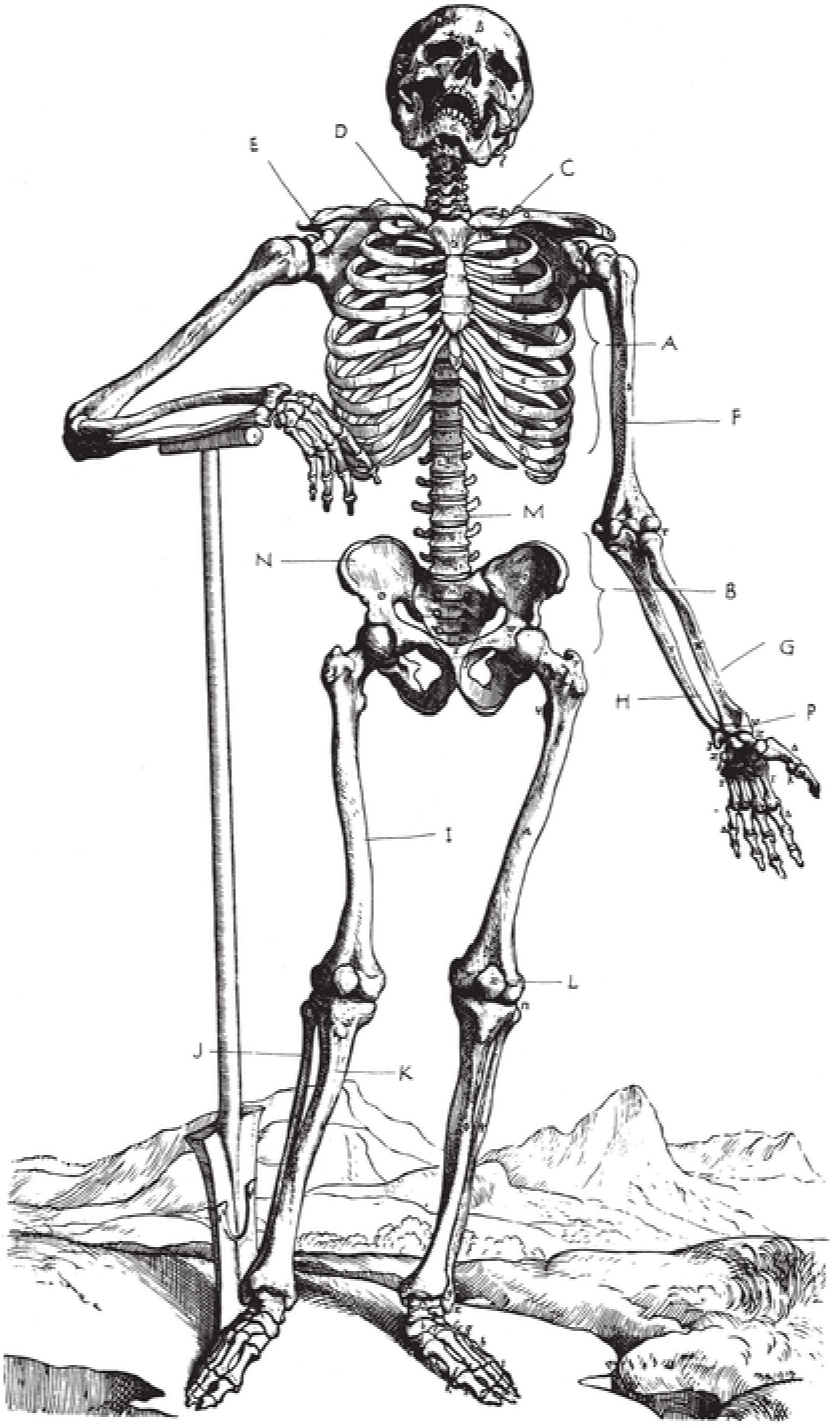
Fig. 8

Dürer. Here the artist concerns himself with proportions arrived at in a rather complicated manner. This drawing is reproduced to show Dürer’s disregard for the classical ideal of beauty.

Fig. 9

Dürer here uses the navel as a center and, with CB and CD as radii, describes an arc making CB-CD. 1-2, 3-4, 5-6, 7-8 are series of arcs described with C as a center and 1-C, 3-C, 5-C, as radii. The spaces between 1-3, 3-5 and 7-D are equal.

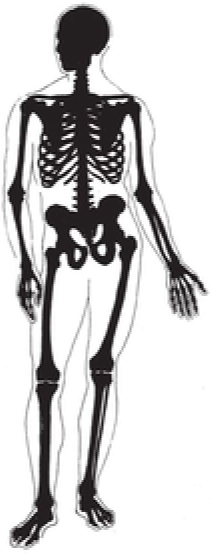

B
C
M
D
E



A. Cage
B. Pelvis
C. Clavicle
D. Breastbone—sternum
E. Shoulder blade
F. Humerus
G. Radius
H. Ulna
I. Femur
J. Fibula
K. Tibia
L. Kneecap
M. Backbone
N. Ilium
P. Wrist (composed of small bones)

JAN STEPHAN VAN CALCAR. Woodcut for one of the earliest books on anatomy, "De Humani Corporis Fabrica" by Andrea Vesalius.

Bone Structure



THE body can be divided into three parts, or masses: the head, the cage, and the pelvis. These three forms are connected by the spine, a strong column in the center or axis of the body, built of alternating discs of bone and very elastic cartilage. Broadly speaking, the various movements of these forms are limited by the flexibility of the spine. The head and the chest, for instance, can be moved sideways, backwards, and forwards.

It is important for an artist to develop a feeling for equilibrium if his figures are to stand, sit, lie, or walk convincingly. In standing positions the legs must not only support the body, but also supply a base upon which the upper structures rest comfortably. The center of gravity must fall within the bulk of the figure if it is to balance. If the figure is in action, the legs must be spread wider to provide a broader base.

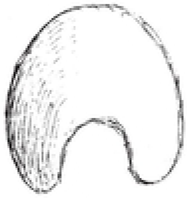


Fig. 10

Unless one is preparing to teach the subject of anatomy, it is not important to remember the names of the bones of the human skeleton. What is useful is to have in one's mind a broad picture of the bone structure, the architecture of the head, cage, and pelvis, and how the limbs set into these parts.

The chest, or cage, for example, looks very much like the shape in *Fig. 10*. It is important to visualize it as a solid and to study it as a shape admirably designed to give protection to the vital organs within it, to serve as the framework to which the arms are attached, and to withstand the various stresses and strains that develop when the body walks, runs, or carries weight.

The backbone combines strength with flexibility—strength to keep a man erect and to tie together the head, neck, cage, and pelvis; and flexibility for varied motion. It is made up of the vertebrae, tiny bones skillfully interlocked for shock resistance as well as maximum strength and mobility (*Fig. 11*). In addition to these functions, this chain of bones encloses and protects the main nerve center of the body, the spinal cord. The vital importance of this structure is recognized even in the popular characterizations of a weak-natured man as "having no backbone" or being "spineless"—an unconscious comparison of moral with physical power.

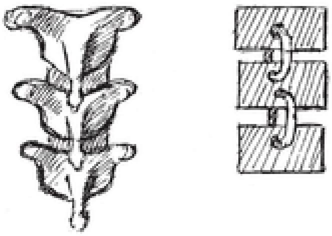


Fig. 11

Observe that the backbone is not a vertical rod, although it is often drawn so by inexperienced art students (*Figs*. 12 and 13). Drawing it straight not only destroys the balance of the figure but also distorts the whole concept of the true rhythm in the body. The side and back views of the backbone are roughly as shown in *Fig. 14*. The vertebral column, or backbone, is subdivided into four main parts—*cervical*, the part in back of the neck; *dorsal*, the part behind the cage to which the ribs are attached; *lumbar*, the part behind the stomach; and *sacral*, the part that sets into the pelvis. The tiny section that extends beyond the pelvis and tapers off like a tiny tail is the *coccyx*. The large rhythms of the figure, therefore, run very much as in *Figs. 13* and *14*.

The arms are attached to the shoulder blades, or *scapulae*, which fit snugly around the back of the cage. Avoid drawing the top of the shoulder blade in line with the neck.

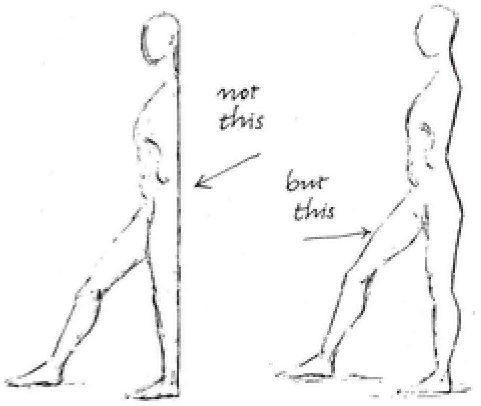


Fig. 12

The shoulder blade should start about one-sixth of the way down the cage from the first rib and should extend approximately to the midpoint (*Fig. 15*).

In the shoulder blade there is a small socket in which the topmost part of the arm, a ball-like head, rests and moves. Also observe that the shoulder blade is not stationary. If the arm is raised higher than the shoulder, it will rotate upwards with the arm (*Fig. 16*).

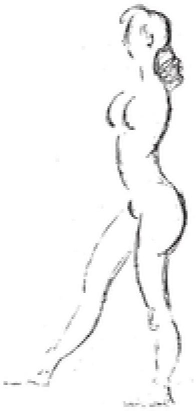


Fig. 13
This sketch illustrates the rhythmic and organic pattern of a figure. It is made up of curves echoing and opposing one another—another way of illustrating the fact that a figure is not made up of a series of uniform and static lines.

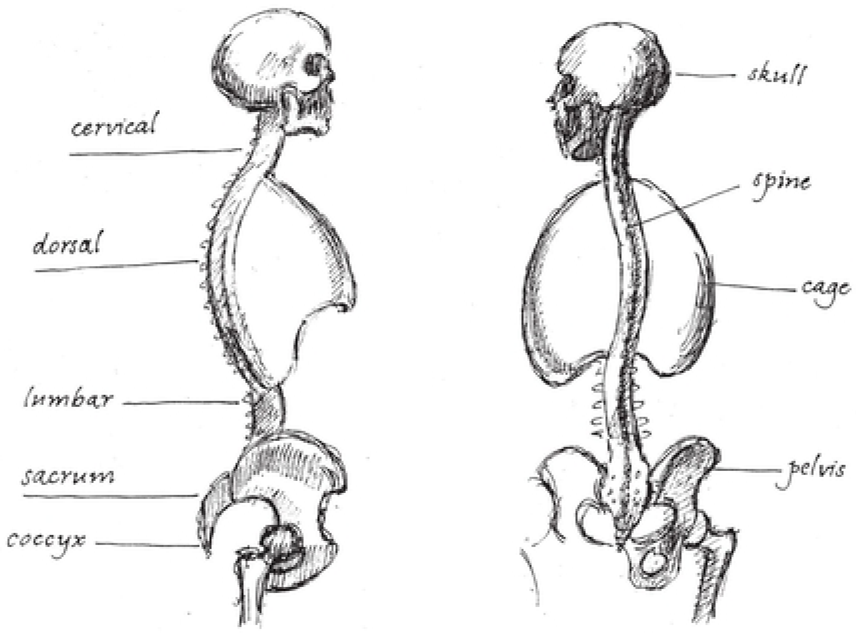

cervical
dorsal
lumbar
sacrum
coccyx
skull
spine
cage
pelvis

Fig. 14

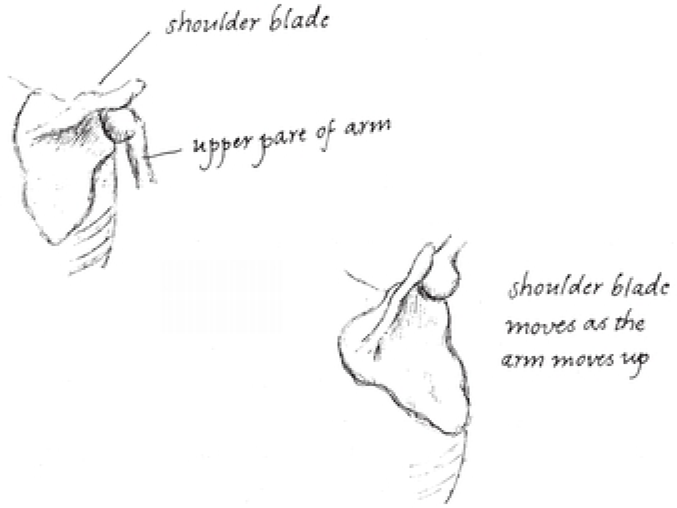

shoulder blade
upper pare of arm
shoulder blade
moves as the
arm moves up

Fig. 16

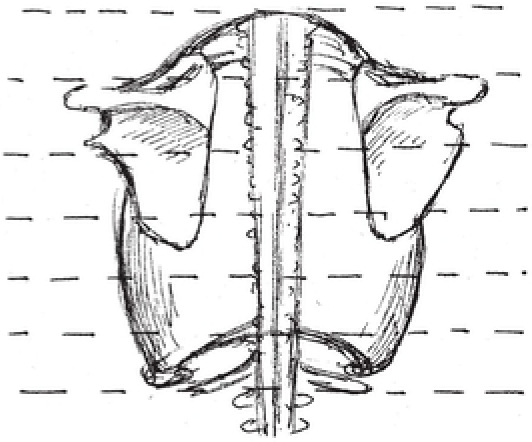


Fig. 15

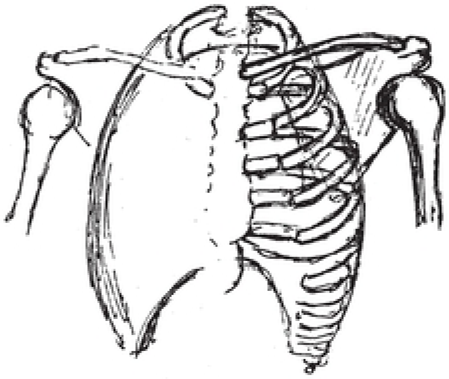


Fig. 17

The shoulder blade is joined at the front of the cage by collarbones called *clavicles (Fig. 17).*

Similar to the construction of the arm in its socket is the upper part of the thighbone, another ball-like structure, which rests in a socket of the pelvis and is free to move about inside it. The upper part of the leg, however, juts out further from the pelvis than the arm from the shoulder blade.

Observe that the legs in the front view start rather far apart at the pelvis and tend to converge toward the center at the knees (*Fig. 18*).[1]

These are the most important parts of the skeletal construction of man. Complete understanding, even of the brief description given here, can come only with time. It is inadvisable merely to study the arrangement of the human machine. Proceed at once with drawing, note your errors, and draw again. The purpose of owning a reference book on human construction is to look at diagrams and pictures at odd moments.

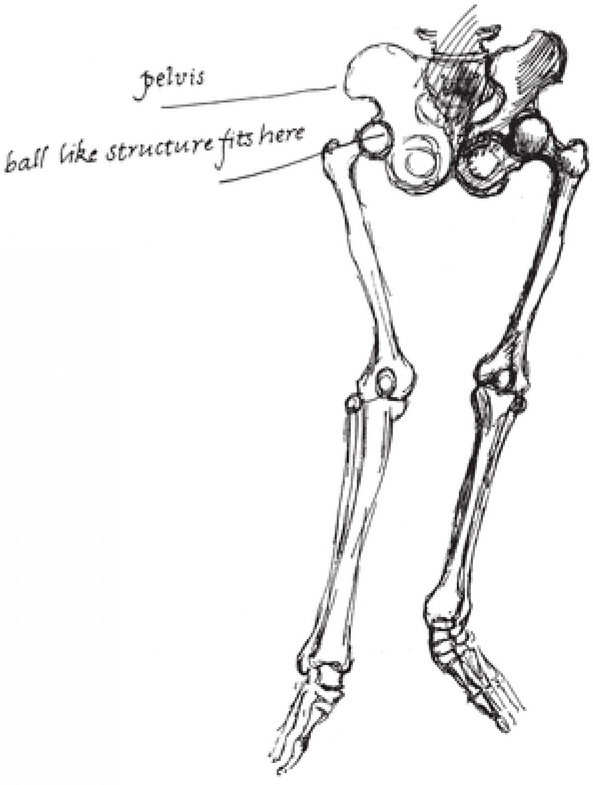
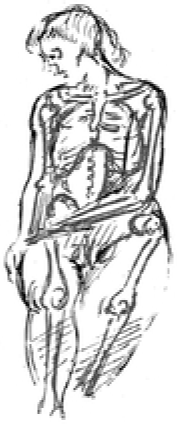
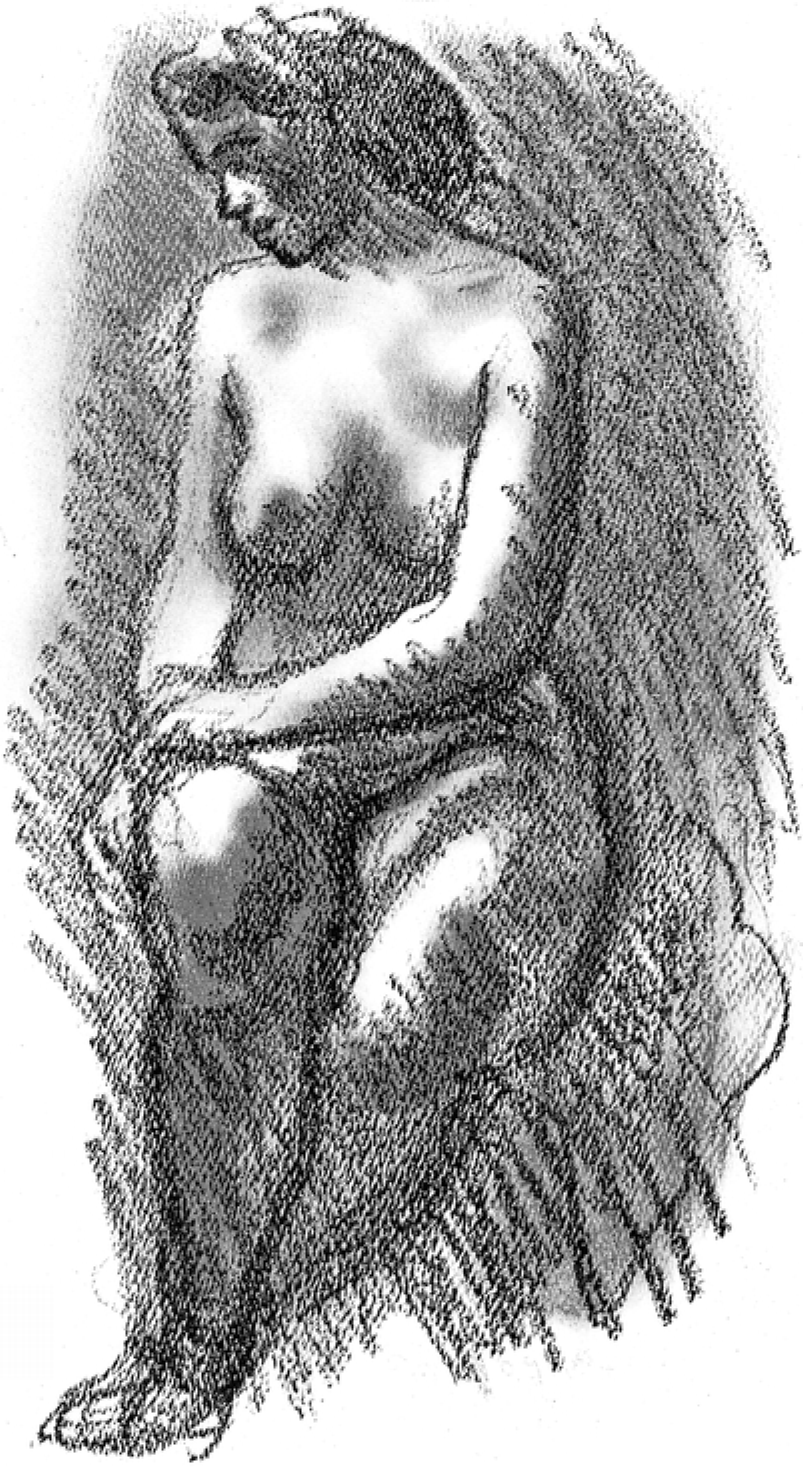

pelvis
ball like structure fits here

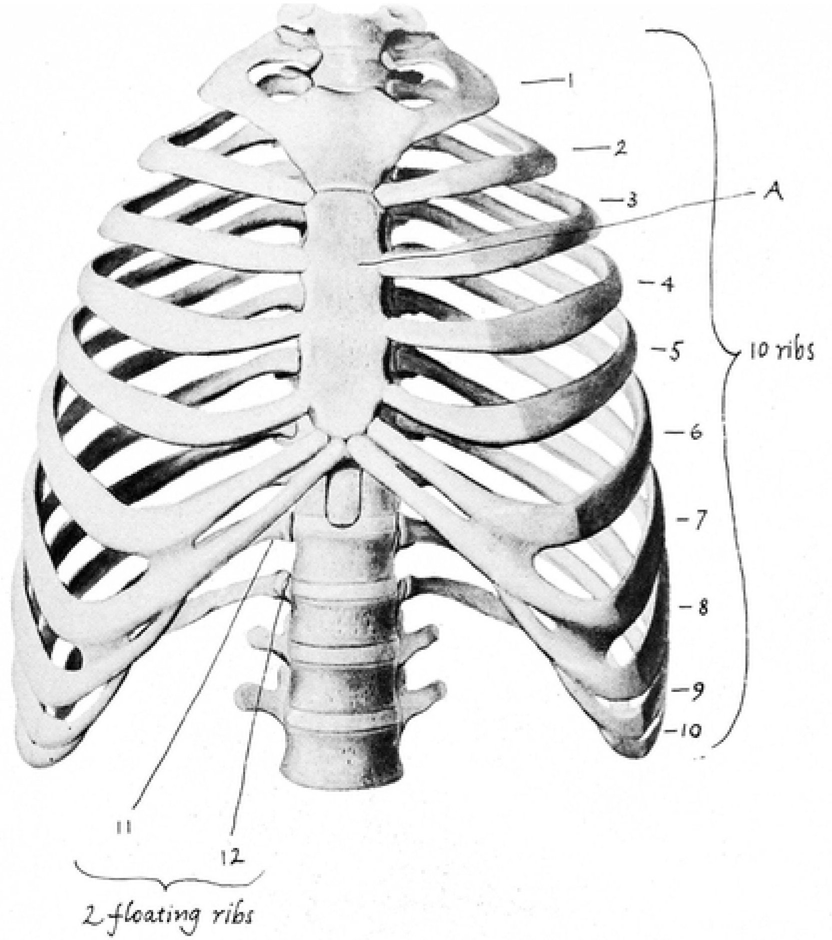
Fig. 18

A doctor's knowledge of anatomy is not at all necessary for an artist. The artist's own needs dictate how much he must know about the construction of man. His problems should prompt his study. Memorizing facts leads nowhere ; understanding them well enough to draw a convincing figure is far more valuable and important.





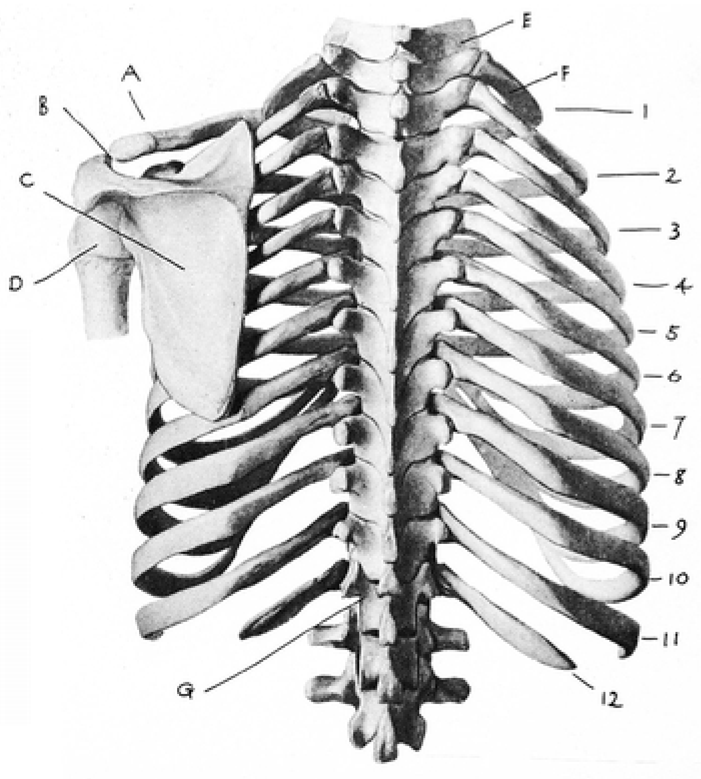
MOSES SOYER



CAGE or THORAX. Front view. The first seven ribs are attached to the sternum; the eighth, ninth, and tenth are attached to one another; the remaining two are called floating ribs and end free in the abdominal wall. The cage is longer in back than in front. The upper end of the sternum is opposite the lower part of the second dorsal vertebra, and the lower tip of the sternum is opposite the tenth vertebra .

A. Sternum

CAGE or THORAX. Back view showing twelve ribs. Observe that the arm does not start at the level of the neck but considerably lower.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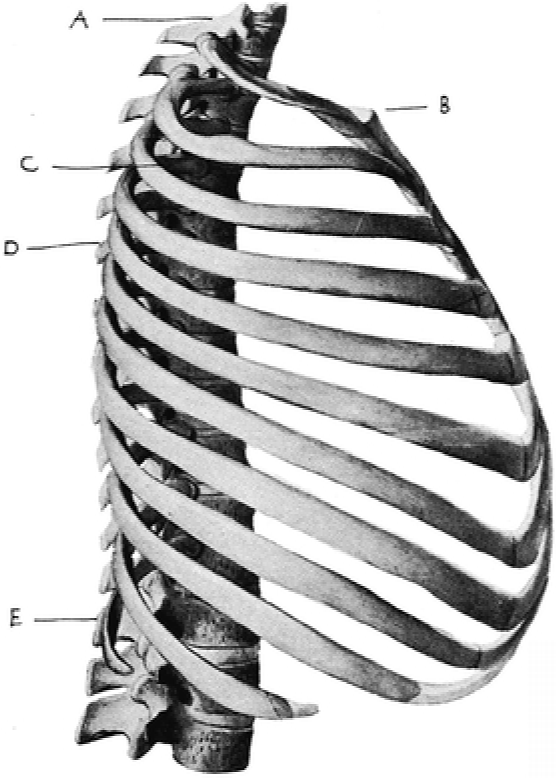
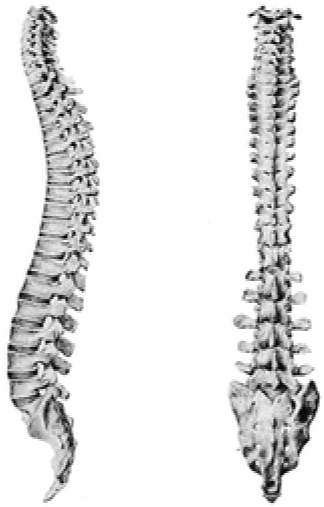


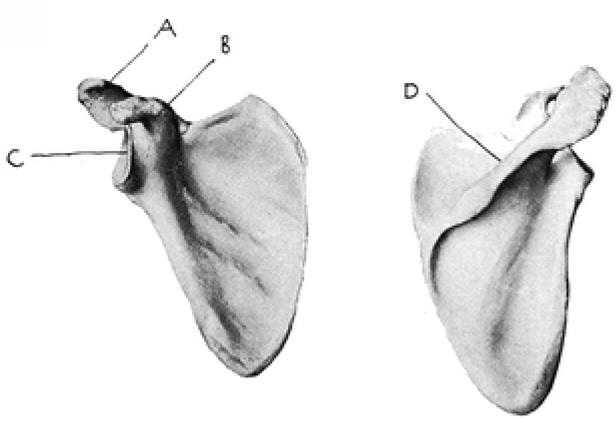
CAGE. Side view.



Side view Back view

SPINE

The spine is not a straight line but has a definite curve. Also, it is not a solid rod but is made up of small parts called vertebrae.



SCAPULA
Front view Back view

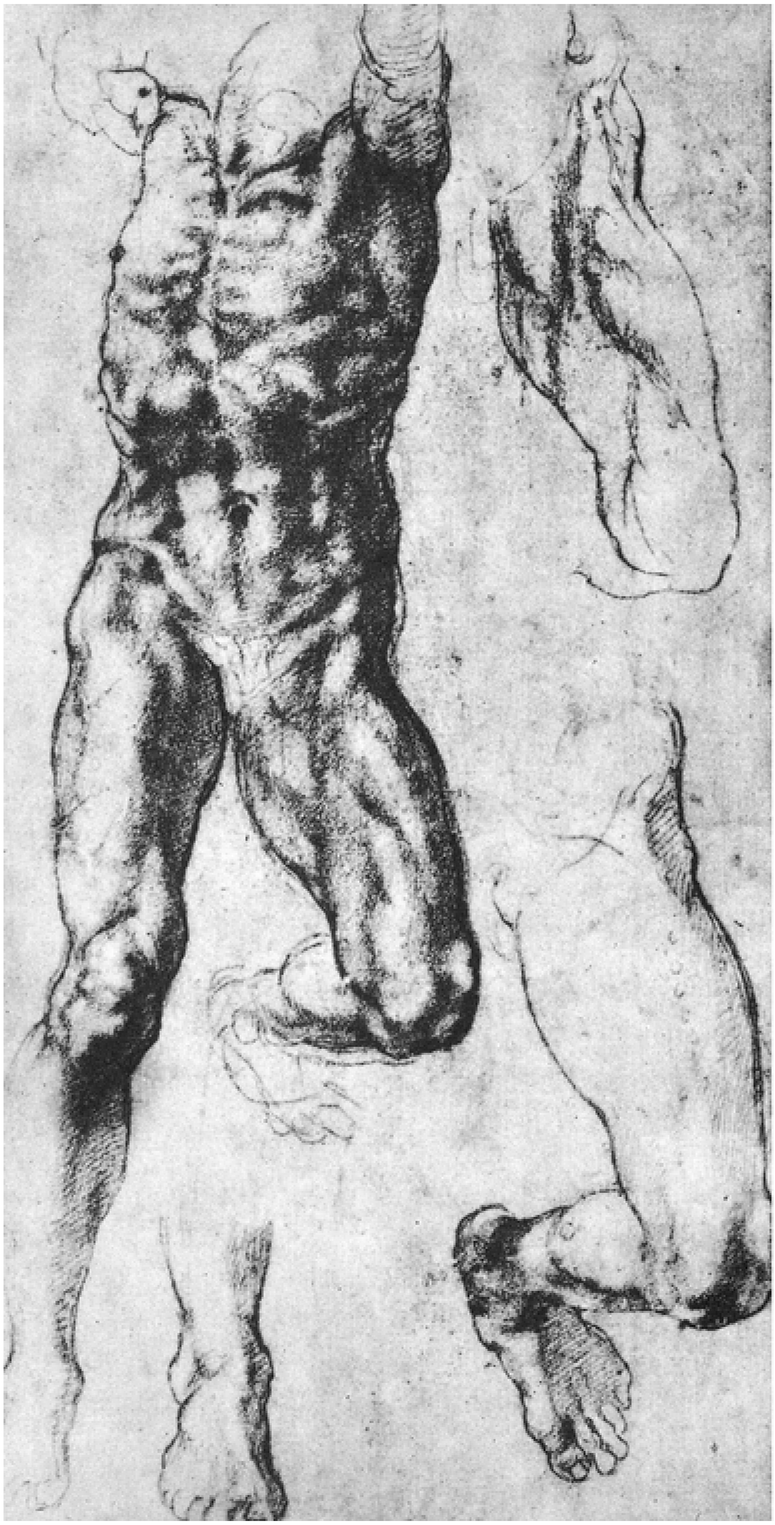
Although the form of the scapula is unlike that of the pelvis, in some respects the functions they perform are similar. Both contain a cavity designed to embrace a limb. Both have a "ledge" to which some of the important muscles are attached (such as iliac crest in the pelvis, coracoid and acromion in the shoulder blade). Viewed from the back, both structures *are well covered by large, strong muscles. Like the pelvis, the scapula moves along with its limb.*

A. Acromion. The clavicle runs from the sternum and meets the shoulder blade at the acromion.

B. Coracoid. Acts as a hook to which some very important arm muscles are attached, such as the biceps and coracobrachialis.

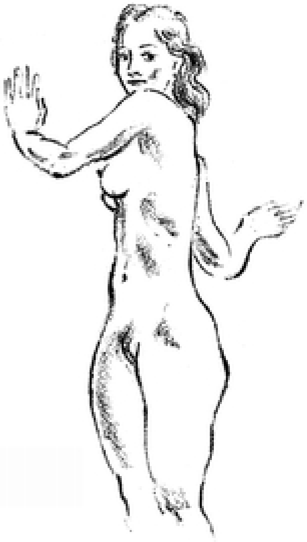
C. Glenoid cavity. The cavity that embraces the arm.

The back view of the scapula is characterized by a projecting spine, D, which widens and becomes the acromion process. Among the muscles that are attached to the back of the scapula are the large head of the triceps, deltoid, trapezius, and teres muscles.



MICHELANGELO. Drawing from life. Study for his frescoes in the Sistine Chapel.

Muscles OF THE TORSO



DOBKIN

THE muscles provide the power necessary for action. Without them the bones become an inert mass of levers, fulcrums, and hinges. A message from the brain will make them contract and move any part of the body, be it an arm, a finger, or the head.

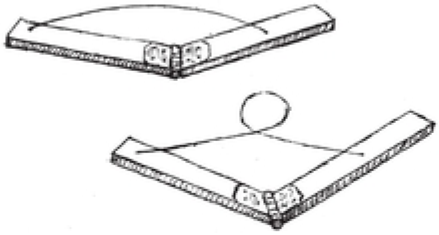


Fig. 19

When muscles contract, they become shorter, broader, harder; and their contours become clearly defined. The muscles often act the way the string does in *Fig. 19* in bringing together the two pieces of wood. If the string is pulled, the two pieces of wood obviously will be drawn toward each other.

The best example of this kind of action is seen in our arms and legs as they bend. But like all simplified examples, this illustration is only a part of the story; its purpose is to make the reader more aware of one important function of the muscles. A medical manual can be consulted for a complete and thorough explanation of the various muscles and their functions.

The largest and bulkiest part of the human body is the cage. The arms are attached to it by means of several important muscles that are prominent. A large muscle, *pectoralis major (Fig. 20)*, is attached to the middle of the cage *(sternum)*, the upper part of the arm, and the collarbone. The shoulder, the outer part of the arm, and the front and back of the arm are capped by a triangular muscle called the *deltoid (Fig. 21)*.

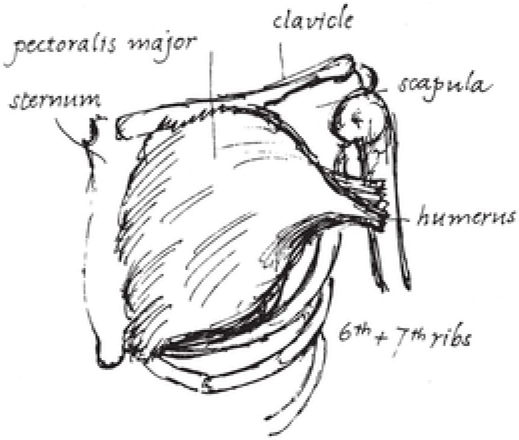


Fig. 20

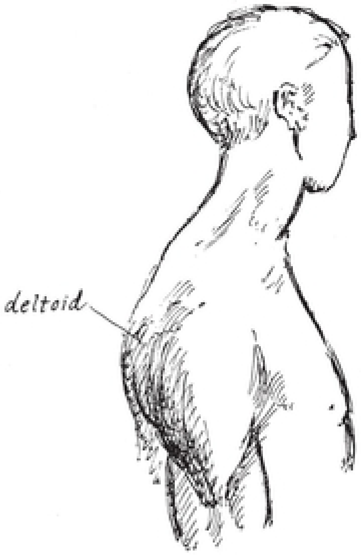


Fig. 21

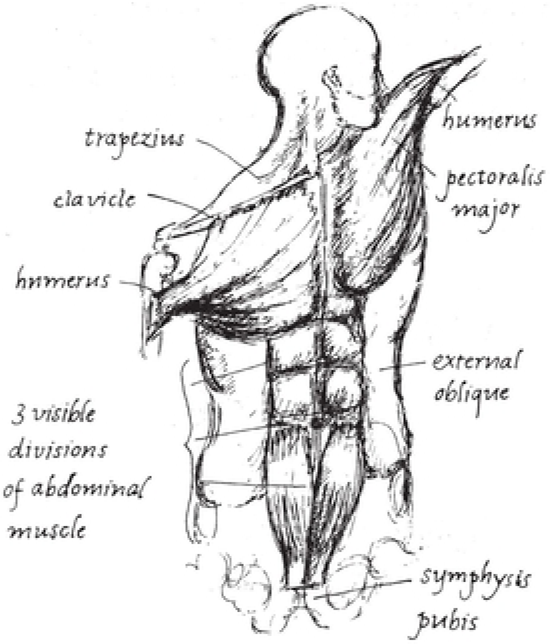

trapezius
clavicle
humerus
humerus
pectoralis major
external oblique
3 visible divisions of abdominal muscle
symphysis pubis

Fig. 22

The abdomen fits into the arch-like part of the cage formed by the lowest ribs *(Fig. 22)* and runs down as far as the region of the pubis *(symphysis pubis).* Its form is characterized by four prominent muscular masses *(rectus* *abdominis)* on each side of the midline, three of which present prominent contours. The fourth and uppermost is partly covered by the *pectoralis major.* The navel is located between the lower and middle sections. The lowest section is the largest.

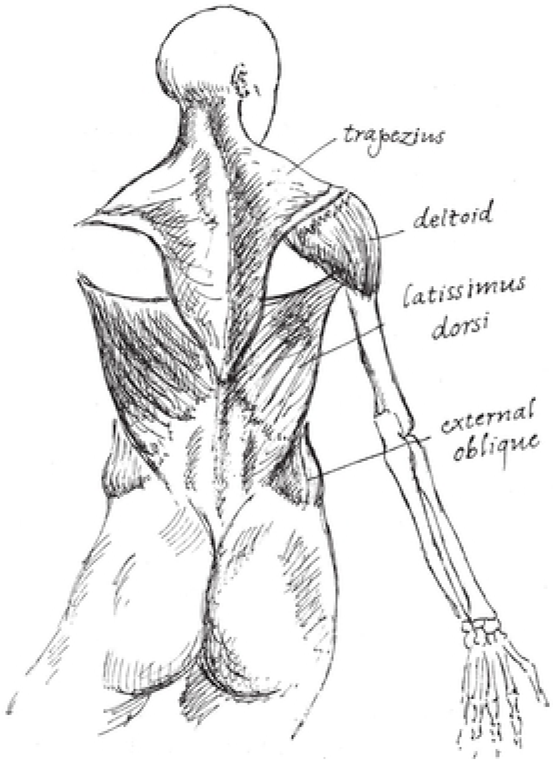


Fig. 23

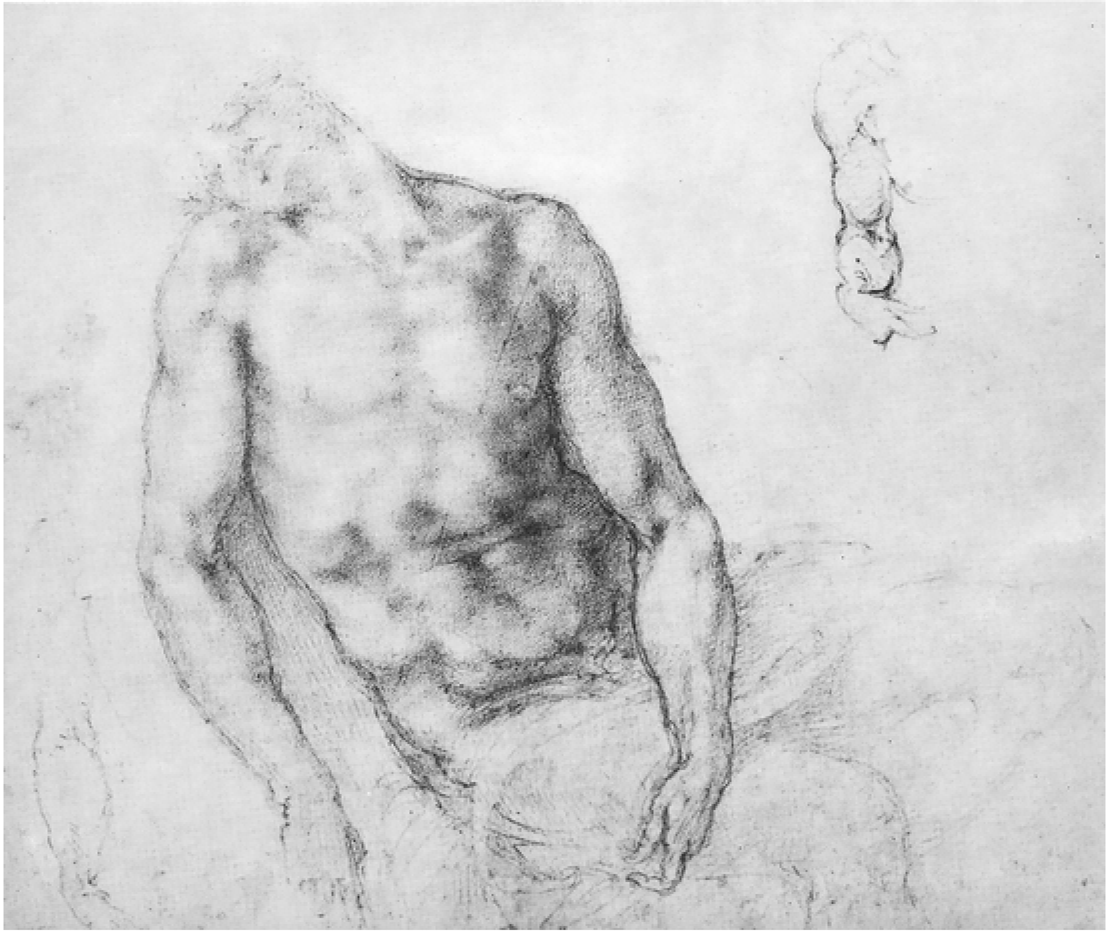
The outer and lower part of the cage is connected to the pelvis by means of two muscles, *external obliques,* one on each side *(Fig. 22).*

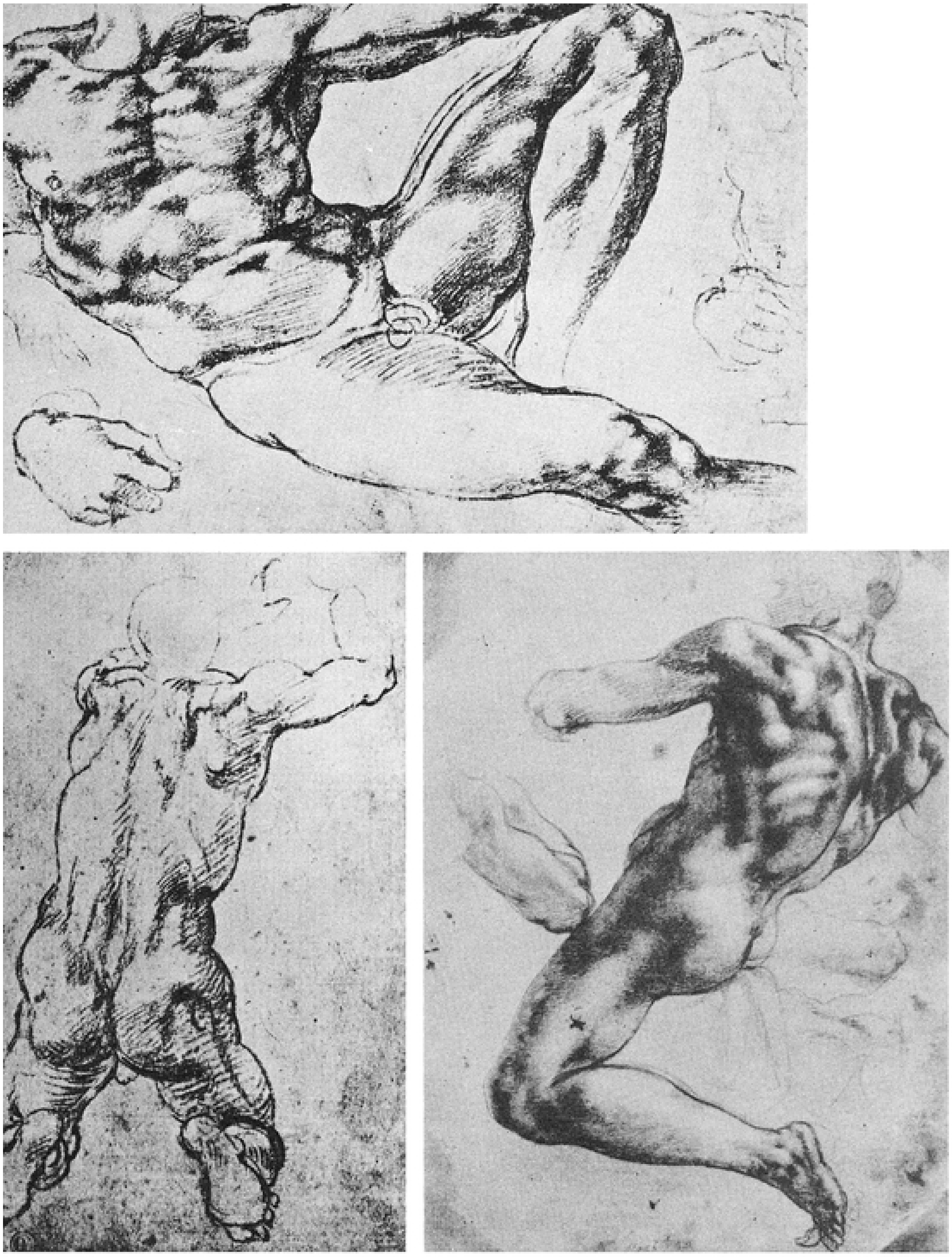
The head is held firmly upon the neck by two important neck muscles, the *sterno-mastoids,* which are plainly visible from the front. These muscles cross obliquely the right and left sides of the neck, each attaching itself to the middle of the body (*sternum*), as well as to the collarbone.

The muscles of the back almost parallel the functions of the *pectoralis major.* A strong muscle, *latissimus dorsi,* attaches itself to the upper part of the arm and runs diagonally down the back *(Fig. 23).*

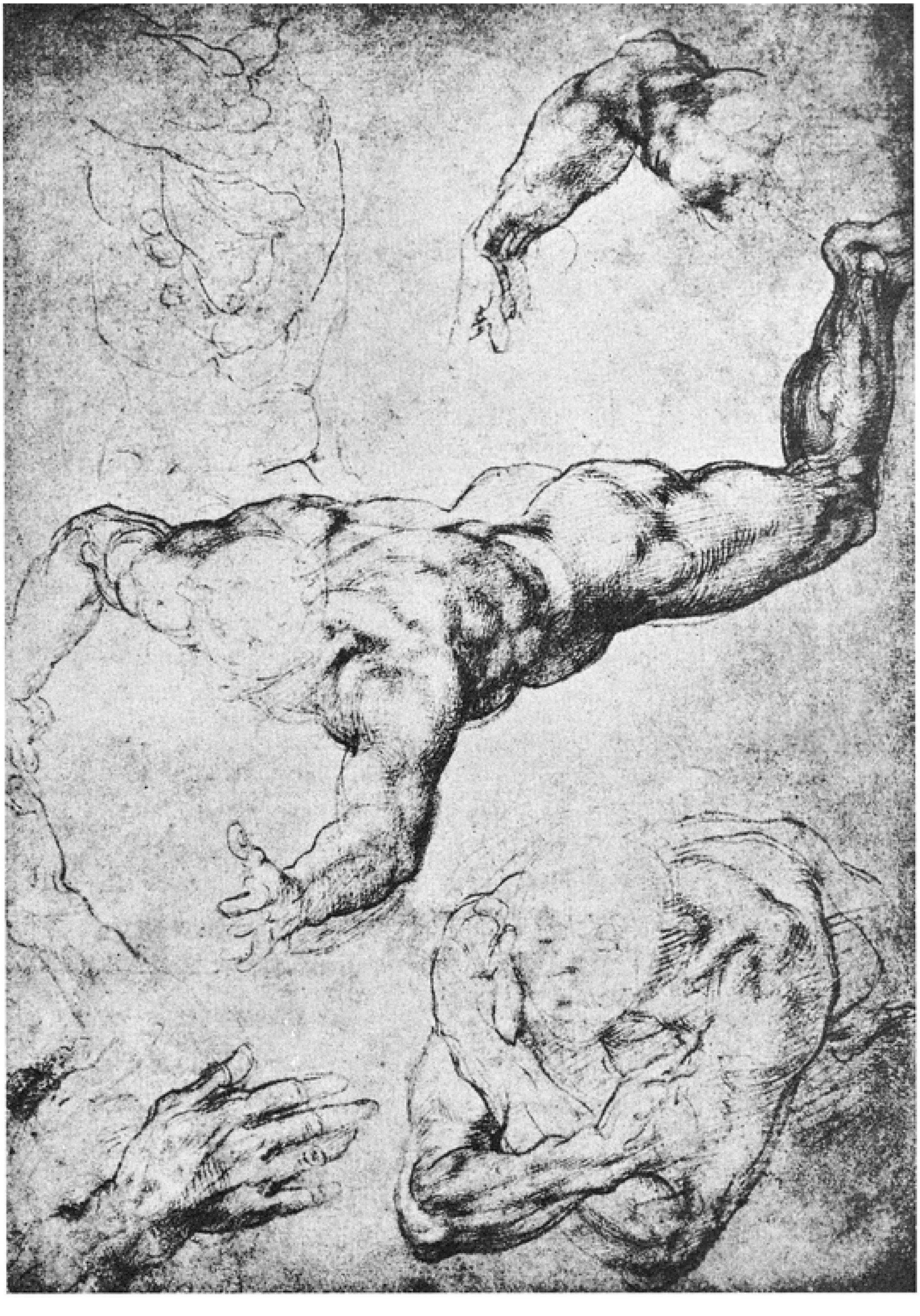
Another muscle, trapezius, covers the upper part of the back, neck, and shoulders on each side. This back muscle, together with less important muscles, is responsible for supporting the neck. Altogether they create the essential form of the back. The front view, too, is strongly affected by the *trapezius* muscle, which rises above the shoulder and travels across it to the collarbone in the front. This is why the neck and shoulder do not form a T-square. (See p. 72.)

MICHELANGELO. Study for a sculpture of the Pietà.

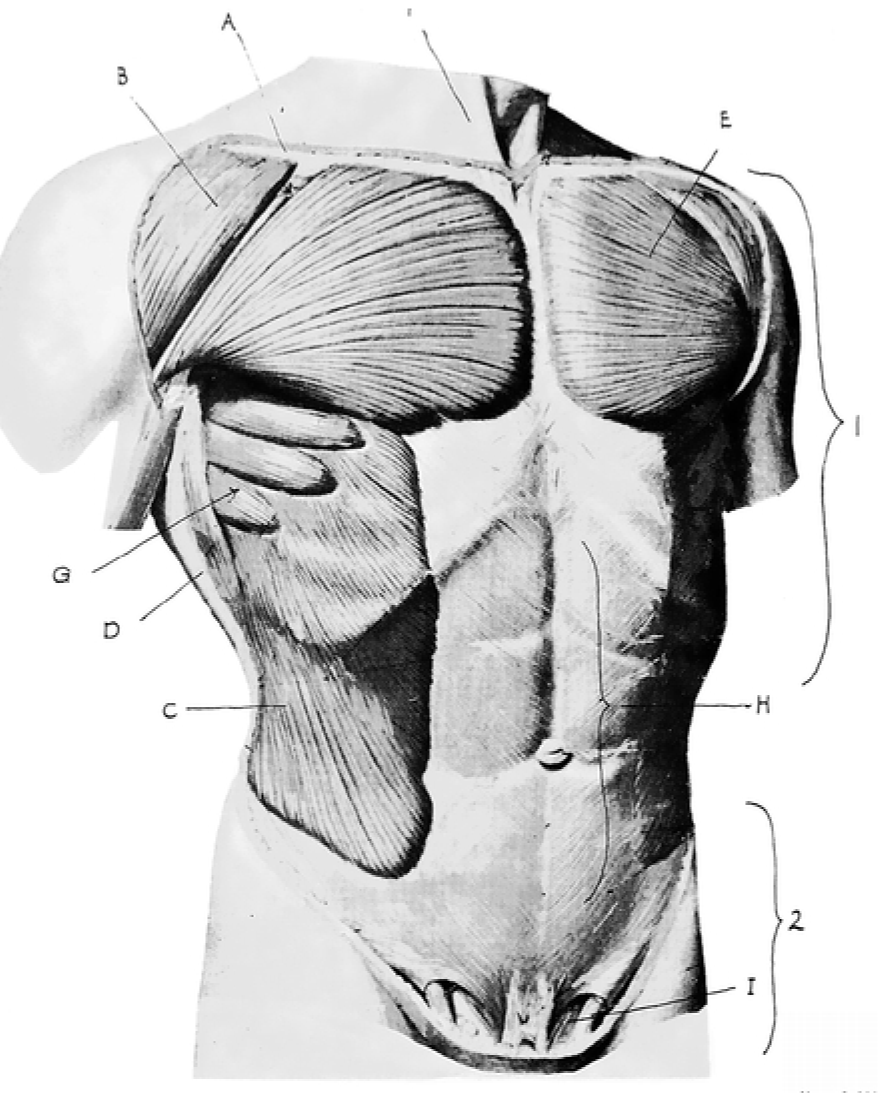




MICHELANGELO. (TOP AND BOTTOM RIGHT) Studies Sistine Chapel frescoes. (BOTTOM LEFT) Study.



MICHELANGELO. Studies for one of the largest murals in the world, “The Last Judgment,” Sistine Chapel.



MALE TORSO. Front view.

A. Clavicle

B. Deltoid. So called because of the similarity of its shape to the inverted form of the Greek letter “delta” (Δ). ACTION: Raises the arm away from the body; also helps pull the arm forward and backward.

C. External oblique. Attaches to eight lower ribs, iliac crest (top of the pelvis), and by a ligament to pubis. ACTION: Each muscle, acting separately, pulls the cage to its own side or the pelvis upward.

D. Latissimus dorsi. Muscle of the back visible from the front.

E. Pectoralis major. A very powerful muscle attached to inner half of clavicle, sternum, the sixth and seventh ribs, and the humerus (upper part of the arm). ACTION: Draws arm forward and backward.

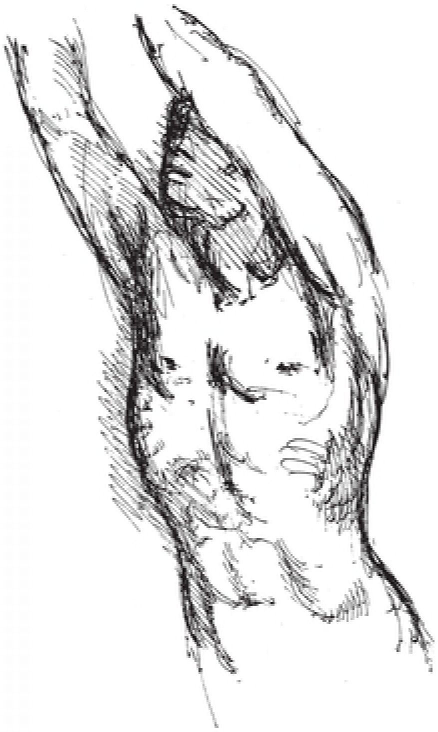
F. Sterno mastoid. Attached to sternum clavicle, and mastoid process (back of the ear). ACTION: Both muscles acting together pull the head forward; acting separately, they pull the head to one side or the other.

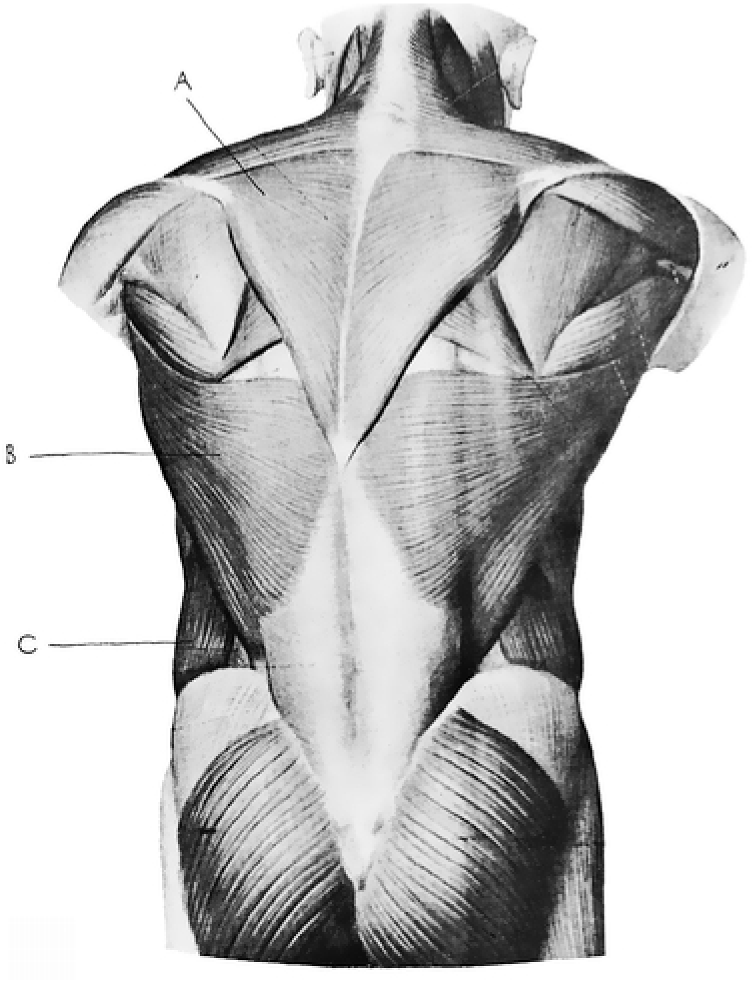
G. Serratus magnus. Attaches to eight upper ribs, passes under the scapula. ACTION: Draws arm forward. Since it is the muscle used in pushing or lunging, it is often called "fencer's muscle."

H. Rectus abdominis. Two flat muscles which extend the whole length of the front of the abdomen, separated from each other by linea alba or white line. Attached to symphysis pubis (I) and cartilages of ribs frorn fifth to seventh.

This muscle is divided by three furrows (transverse lines). The top sections are approximately equal in length; the lower section, extending from the umbilicus to the pubis, is the longest. ACTION: These transverse divisions are necessary to enable this muscle to bend the trunk forward.

1. The cage. 2. The pelvis.




A
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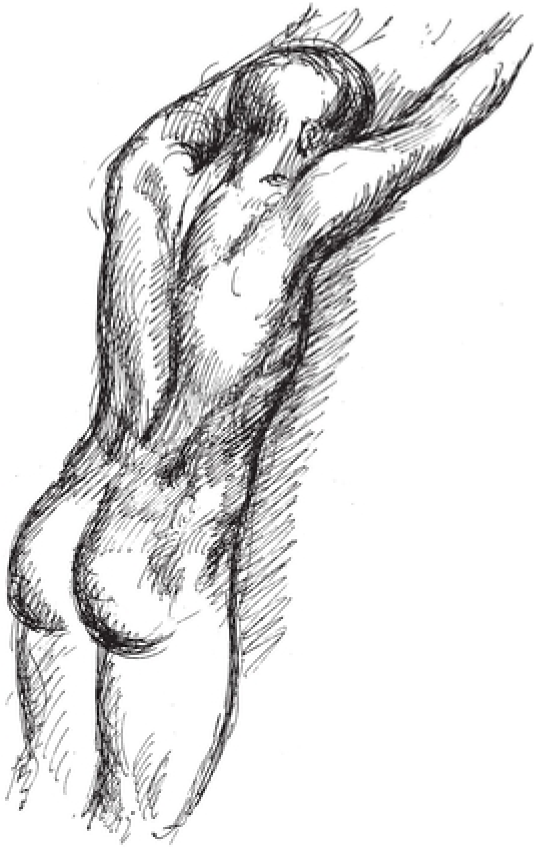


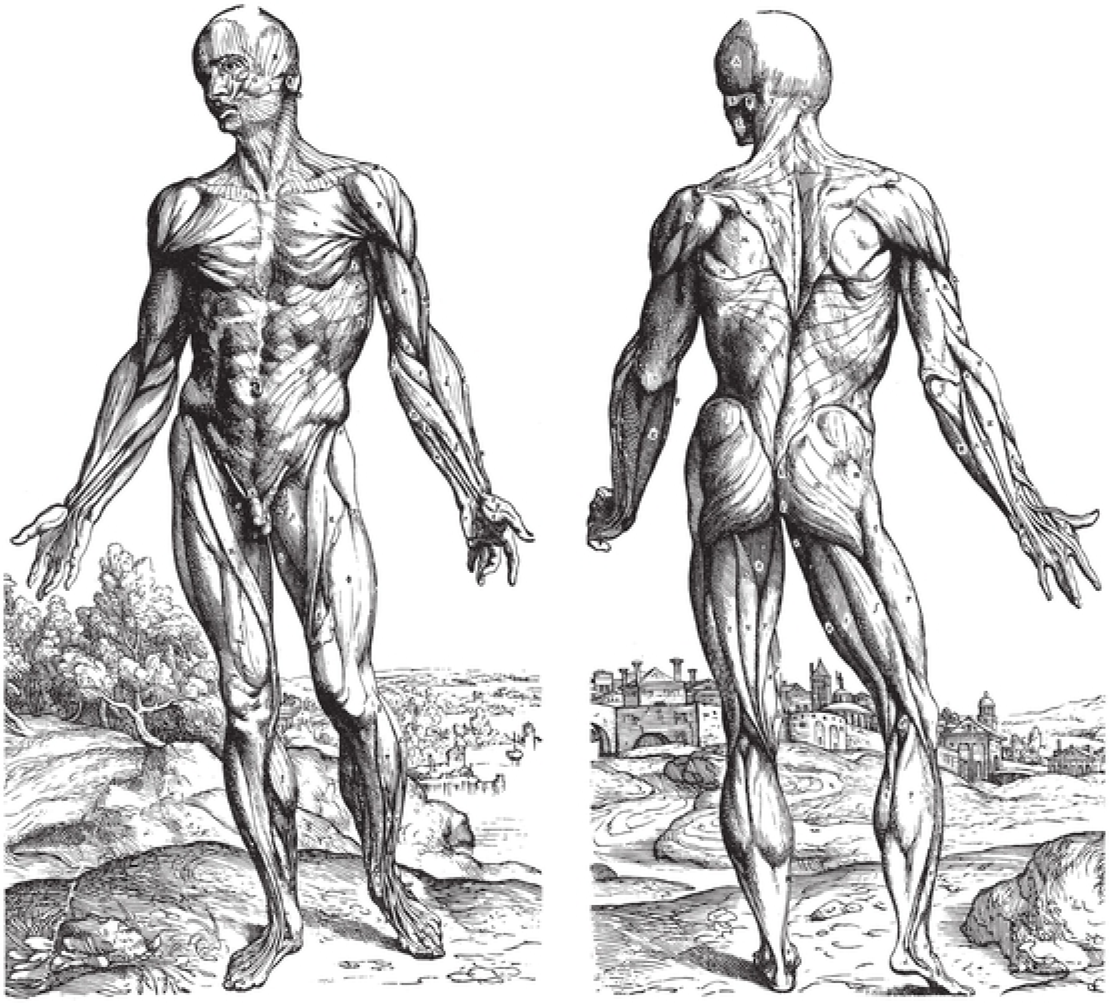
MALE TORSO. Back view.

A. Trapezius. Attaches to lower back of the skull (occipital bone and spine as far back as the twelfth dorsal). In front it is attached to the clavicle and shoulder (acromion and ridge of shoulder blade). Both muscles together are reminiscent of the lower part of a diver's helmet that is screwed on the body in the front, on the sides, and on the back. ACTION: Unbends the head, elevates the shoulders, and rotates the shoulder blade.

B. Latissimus dorsi. Together these two muscles form still another triangle. They are attached to the spine as far down as the sacrum and the top part of the pelvis (iliac crest), and pass inside the humerus to fasten to the front side near the top. ACTION: Draws arm backward and inward.

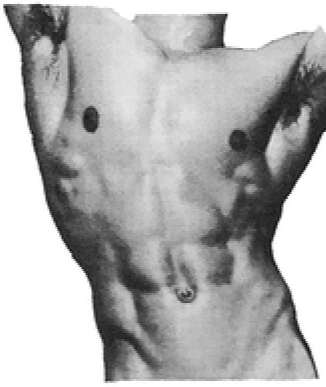
(NOTE: Although both the trapezius and latissimus dorsi are muscles of the back, they can easily be seen from the front [Fig. 29] the former rising above the shoulders and the latter being visible right under the arm and outside the ribs.)

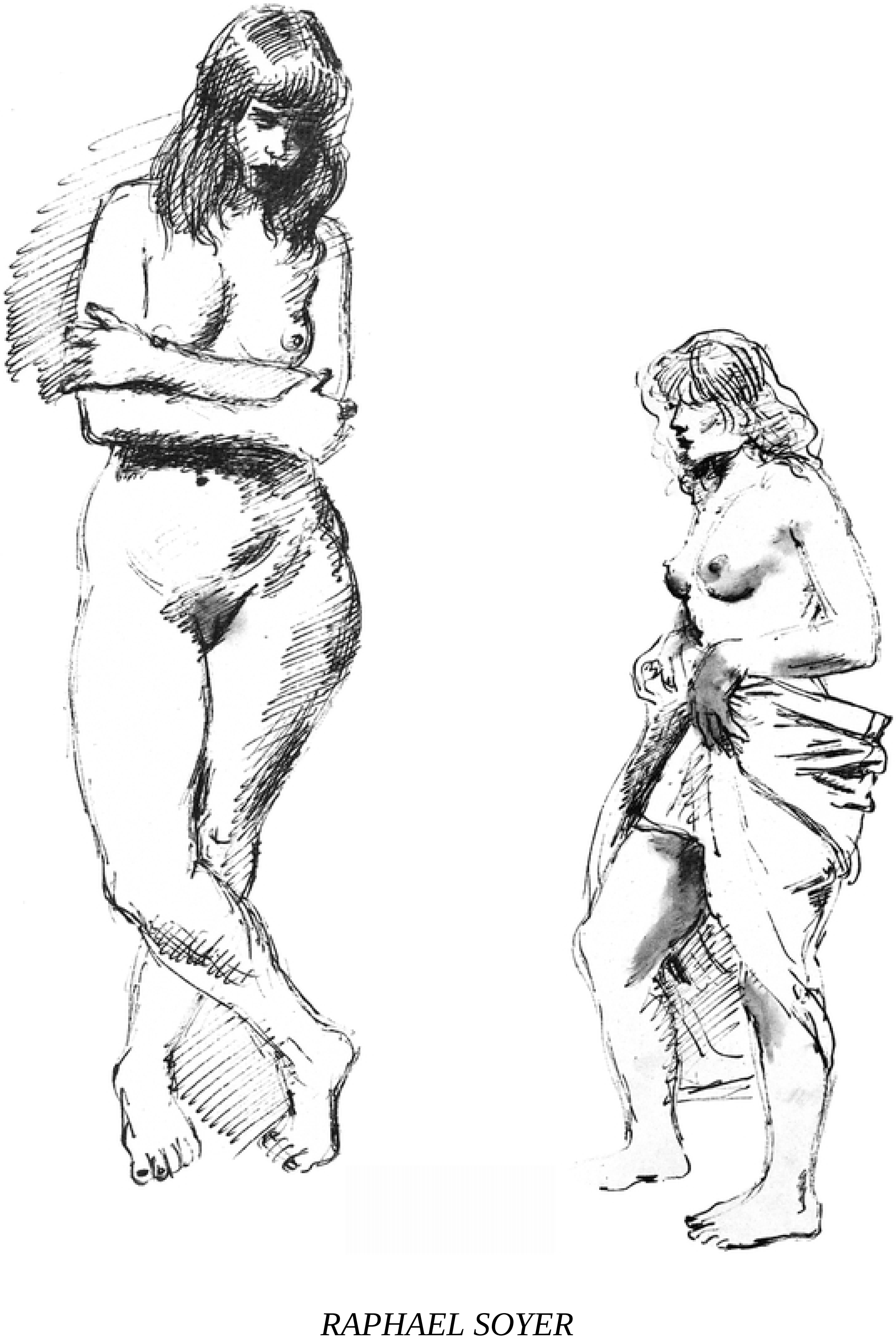
C. External oblique



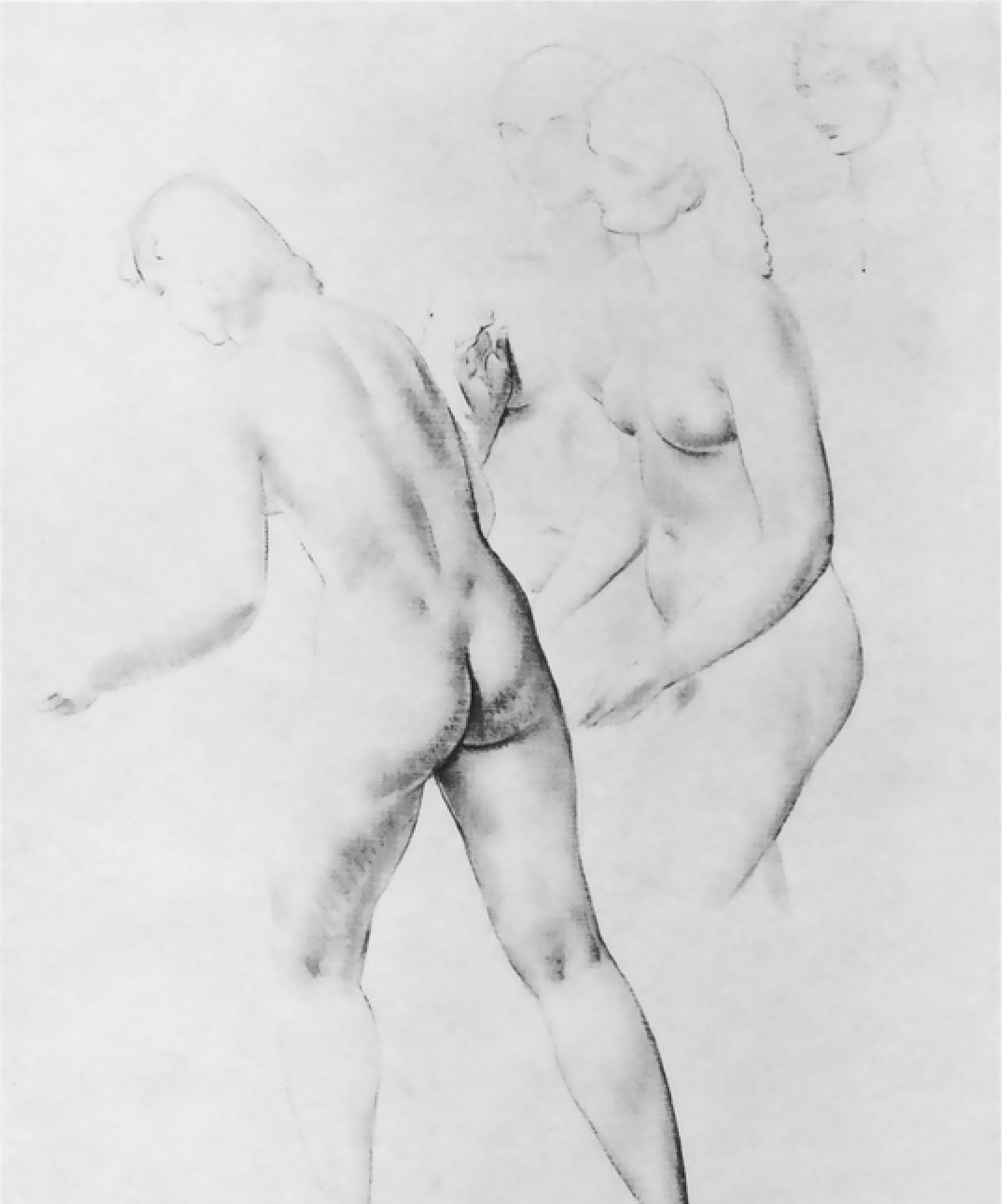
JAN STEPHAN VAN CALCAR. Illustrations from “De Humani Corporis Fabrica” by Andrea Vesalius, a sixteenth-century treatise on anatomy by the most distinguished anatomist of his day. These remarkable illustrations were cut in wood by an artist who had a gift for representing factual elements with rare skill and imagination. Today this book is cherished not only for its anatomical text but also for its creative figure drawings.

We can hardly expect to see most of the muscles clearly defined in a life model. Among males, a highly developed body where most muscles are visible on the surface is very rare indeed. On the female figure, which is fleshier, only the larger muscles are distinguishable.

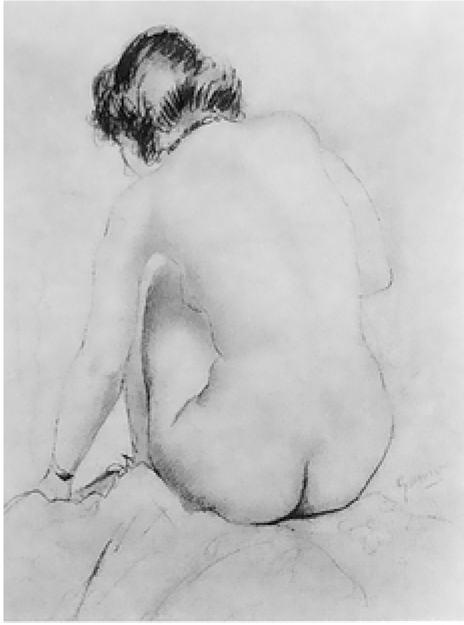




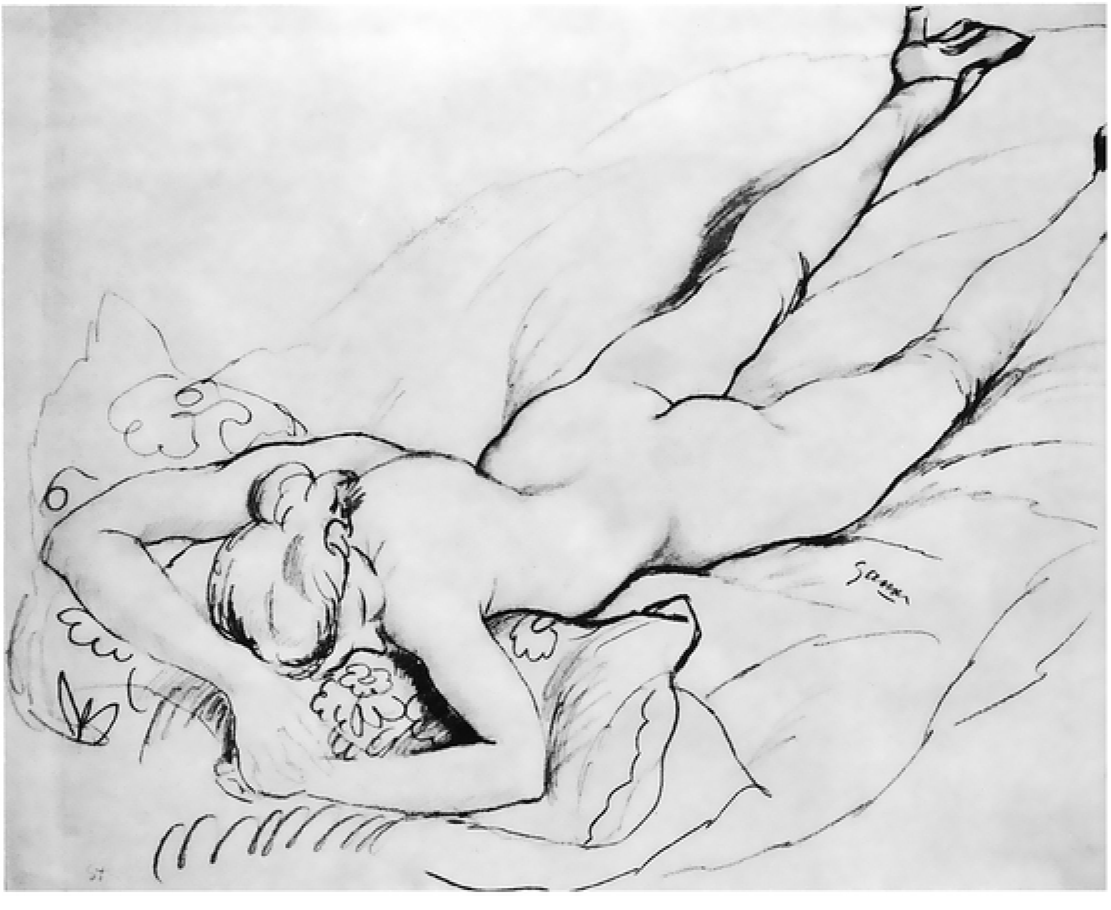
RAPHAEL SOYER

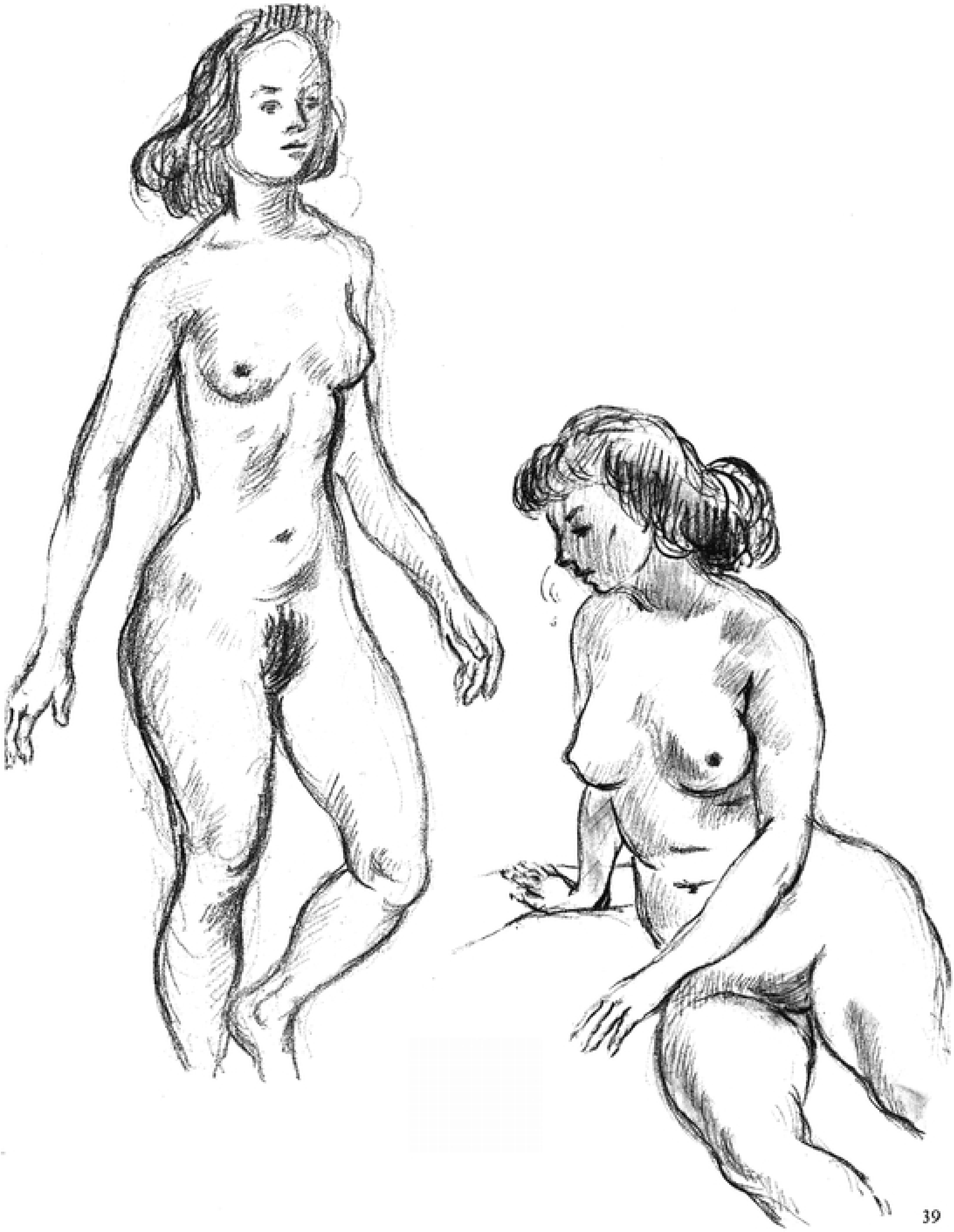


KROLL

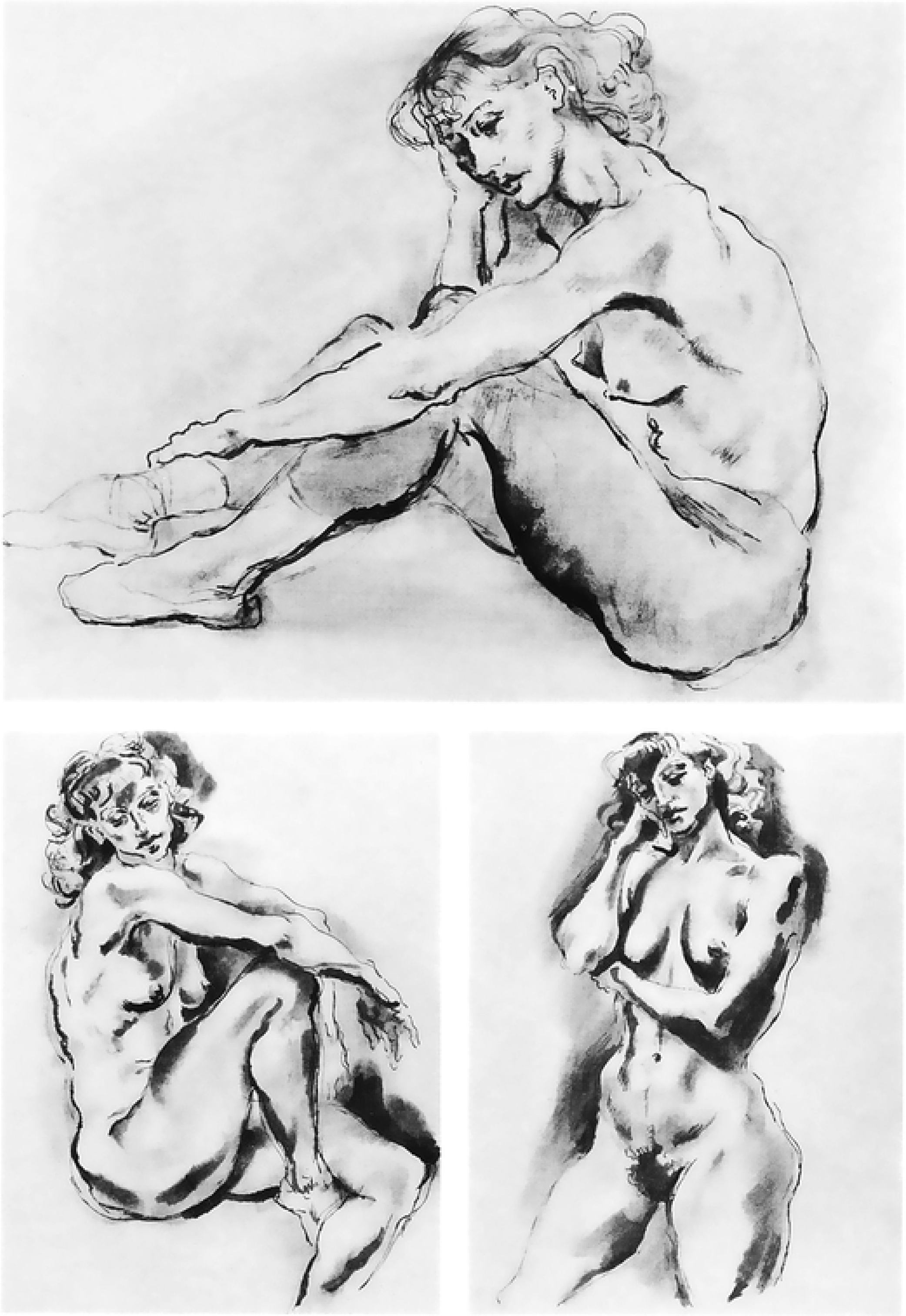


GANSO

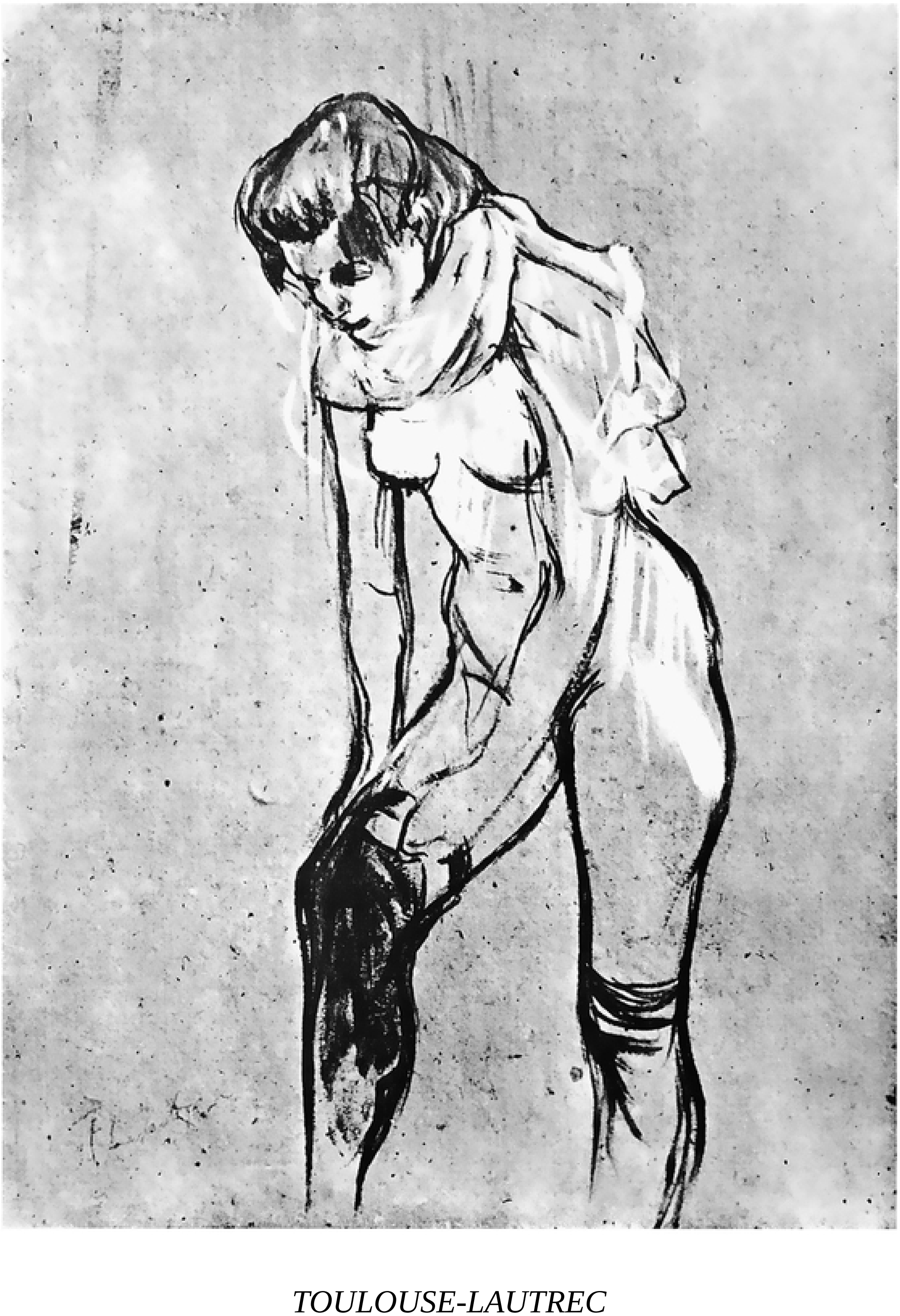




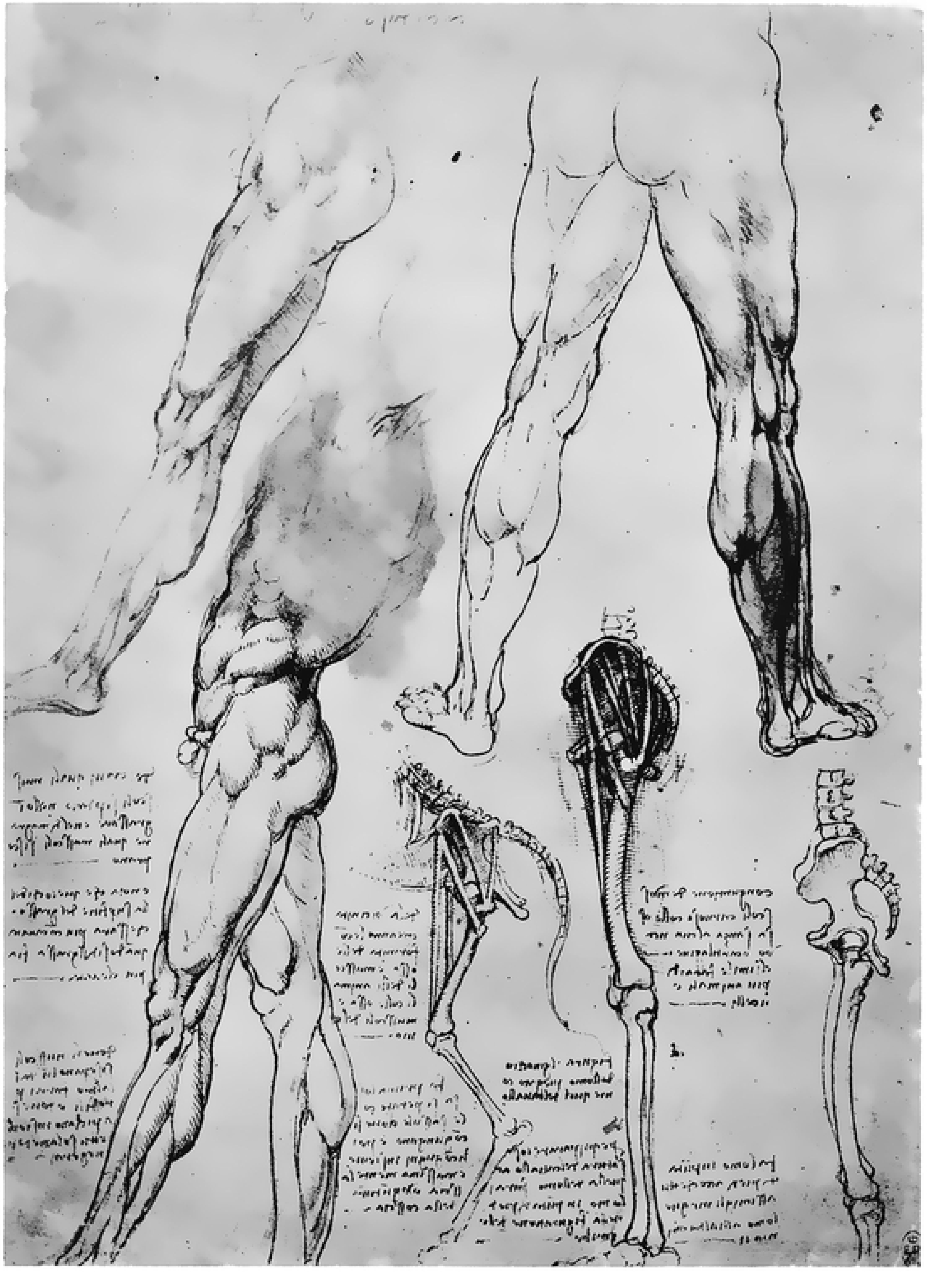
DOBKIN



FREDENTHAL

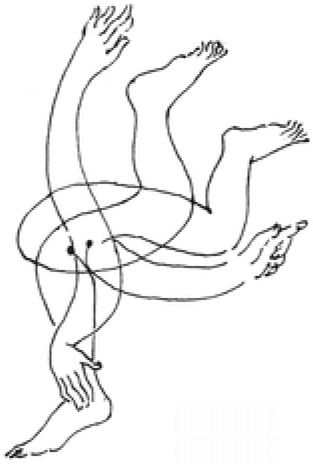


TOULOUSE-LAUTREC



LEONARDO

The Limbs



DOBKIN

THE ARM

THE most common mistake made by pupils in drawing the arms is to make them puny and short, resembling those of a kangaroo. It is important to conceive the upper limbs as instruments that perform some of our most important functions—lilting, working, balancing. To perform these jobs, the arms have to be sturdy and long enough to enable us to reach for things conveniently.

It is significant that children and many primitives dwarf the arms or even draw them as two sticks. A child draws that way because to him, with his limited experience, all other parts of the body seem to be so much more important than the arms. But sooner or later the art student must begin to examine more closely and observe that the arms come down from the shoulders and, when pressed against the sides of the body, reach a point approximately 5 or 6 inches below the pubis.

Such artists as Dürer, Michelangelo, and Leonardo da Vinci, to mention a few, have all contributed toward a greater understanding of the proportions of the limbs. It is interesting to see how Dürer, in his many drawings of proportions, developed the navel as a center from which he established radii that form an interesting relation between the limbs and the rest of the body. (See p. 17.)

The arm is made up of three bones (*Figs. 24* and *25*). In the upper part of the arm there is one bone, *humerus,* that fits snugly into the shoulder blade. The lower part of the arm is made up of two bones, *radius* and *ulna,* whose position changes as the arm rotates. When the palm faces outward, in a supine position, these two bones are side by side. They cross, however, when the palm is turned inward, in a prone position. These two bones meet the wrist and are thus able to rotate the hand.

Knowing that the arm bends at the elbow, many pupils conceive it as a limb made up of two parts and draw it incorrectly as two ovals, putting the thinnest part where the ovals meet (*Fig. 26*). Another common error is making the arm broadest at the top and tapering it evenly down to the wrist. Actually, the arm is broadest just below the elbow and tapers at the wrist, and the muscles that bend and rotate it extend from the upper part of the arm to the lower. As with the leg, the muscles of the arm weave in and out throughout the entire limb, making it one complete form. There are no isolated upper or lower arm forms; each curve interlocks with another.

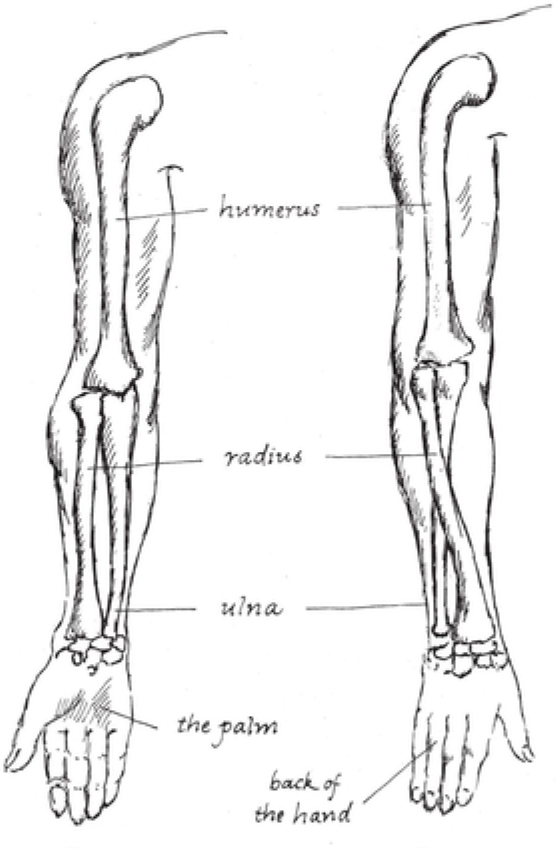


Fig. 24 Fig. 25

In Fig. 24 the arm is in supine position. In Fig. 25 it is in prone position. When the palm turns from supine to prone position, the radius crosses the ulna.

The muscle responsible for bending and rotating the arm is called *biceps.* It is attached to the upper part of the arm inside the shoulder joint (partly covered by the *deltoid*) and extends to the upper part of the lower arm—to the two bones, the *radius* and *ulna* (*Fig. 27*).

Another muscle directly in the back of the *biceps* is called *triceps.* This muscle is responsible for straightening out the arm after it has been bent. To an artist these two muscles are important because the contour of the arm, especially when viewed in profile, is conditioned by them. The *biceps* muscle is extremely prominent when the arm is in the process of lifting.

Both the *biceps* and the *triceps* are really the “worker’s muscles.” Continued and hard labor and exercise make them exceedingly prominent. That’s why boxers’ arms are exceptionally wide just below the shoulders.

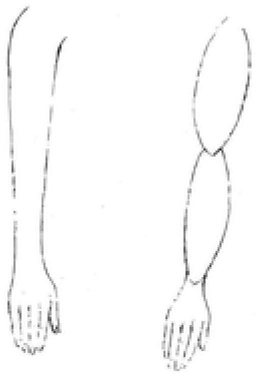


Fig. 26

Supinator longus and *long radial extensor* are two muscles that are situated side by side and look like one. The contour of the lower part of the arm is strongly affected by them. There are also many smaller muscles in the lower part of the arm, most of them primarily governing the movements of the fingers. All of these illustrate once more that although the arm is made up of many undulating curves and straight lines, they are so closely related and interlocked that together they form a continuous contour from the shoulder to the wrist.

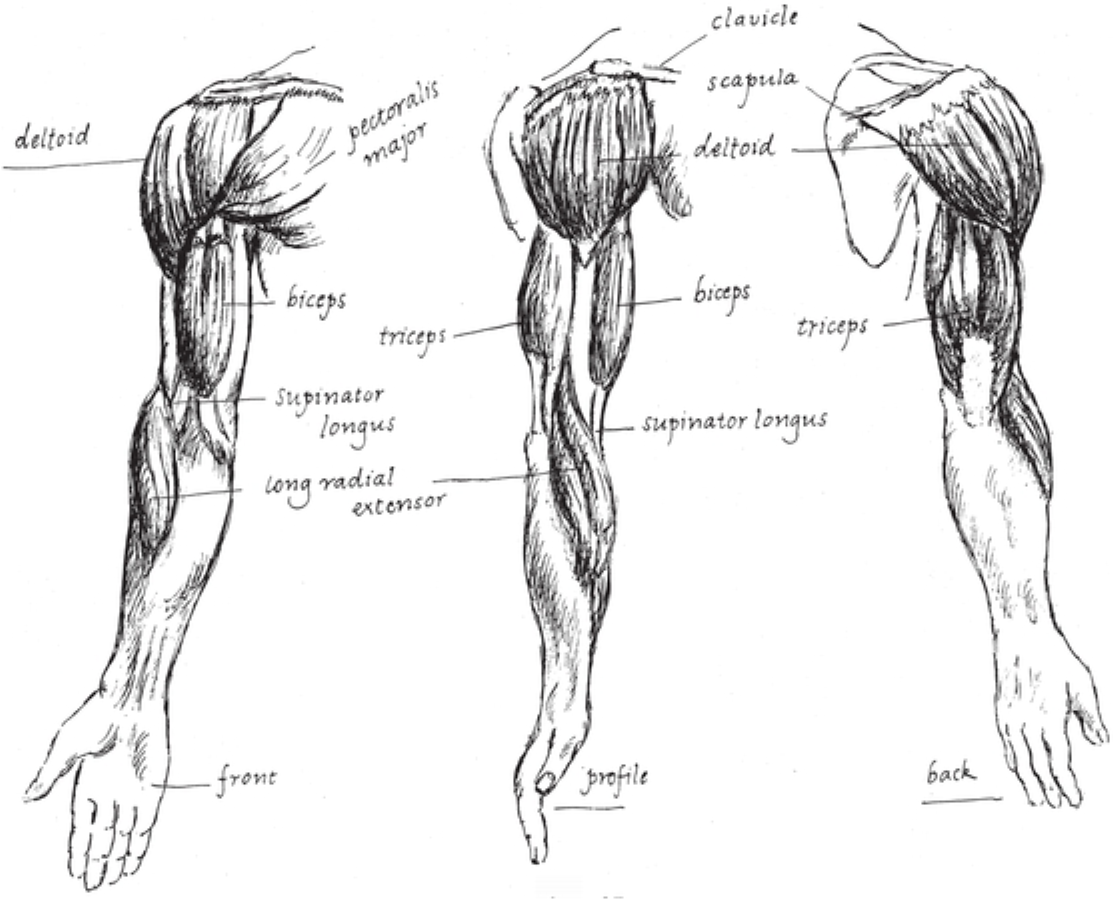

clavicle
scapula
deltoid
pectoralis major
deltoid
deltoid
biceps
biceps
triceps
triceps
Supinator longus
supinator longus
long radial extensor
front
profile
back

Fig. 27
Biceps. Bends forearm and rotates the radius outward. Triceps. Straightens out the arm after it has been bent.
Supinator longus. Bends the elbow.

THE HAND

The hand is perhaps the easiest part of the body to draw without the aid of a mirror or a model, because we see our own before us almost constantly. A student can look at it very often, study its motions, proportions, and joints.

As with anything else we draw, it is better to start with the general and then go to the particular (*Fig. 28*). Before doing the fingers, draw the whole hand.

The starting points of all fingers except the thumb are plotted on a curve, not a straight line (*Fig*. *29*). The thumb starts at a much lower level than any other finger, and its tip reaches a point just below the middle joint of the index finger (*Fig*. *30*). Note that when one finger bends there is a tendency for all to bend together. It may help to conceive of the five fingers as a separate mass built upon the lower part of the hand.

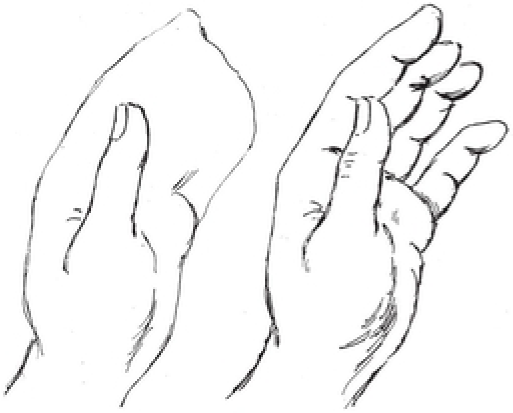
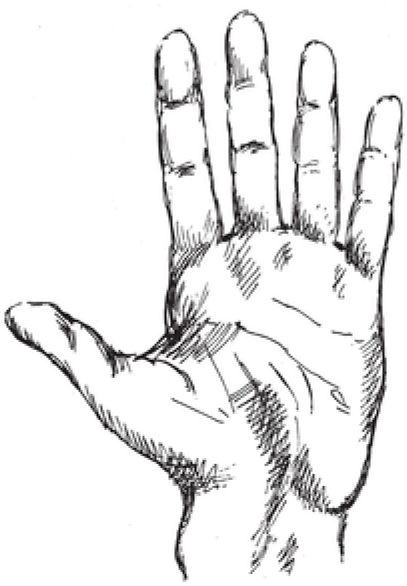
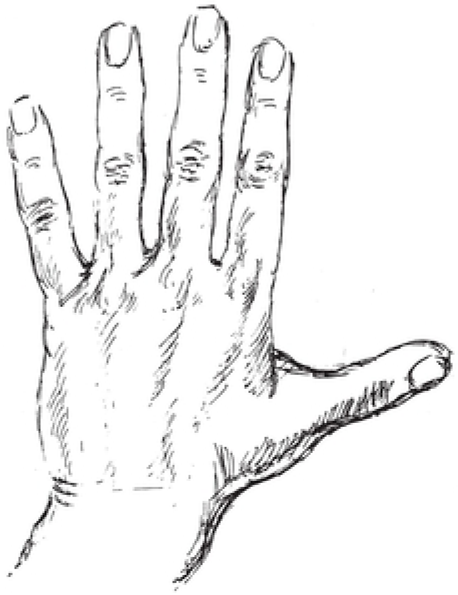
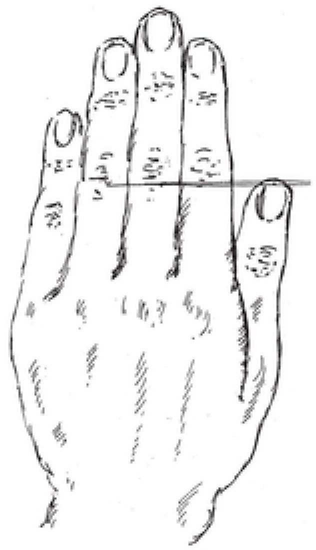
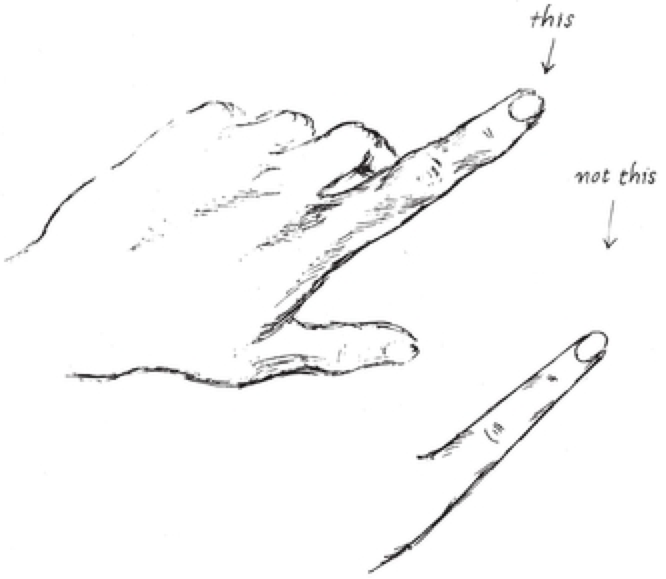


Fig. 28









Fingers are not shaped like flagpoles, wide at the bottom and tapering evenly toward the tip. To be sure, the base is the widest part, but the fingers, as they taper, become wide again at each joint. Each of the three sections of the finger becomes progressively narrower, the smallest being at the tip which carries the nail (*Fig. 31*).

The thumb has one less joint than any other finger, hence it is shorter. In appearance, however, it is broader and sturdier, with a fleshy, cushion-like part that sets into the wrist. Its middle joint is extra large. It is built for strength rather than movement.

Hands have fascinated the artist for centuries. All artists study them carefully and use them as a means of telling a story or of creating a striking composition. Pain, supplication, restfulness—practically all human emotions can be expressed through the movements of the hands. If their movements are used expertly and imaginatively, they become an intense and moving factor in the composition. Two hands, especially when well-drawn and expressively related to one another, have the power to provoke a deep emotional response. By dovetailing them or overlapping them meaningfully, the artist becomes not only a storyteller but a creator of beautiful design and pattern.

In post-Renaissance painting in Italy there seems to be a kind of graceful coldness about the painting of hands. At this point in the history of Italian painting, artists were losing their eye for profound human experiences, and along with this blindness to real life, their interest in using the limbs, and even the body, expressively was rapidly disappearing.

In the Northern countries, however, storytelling through hands persisted for a long time. With artists such as Dürer and Grünewald, drawing hands was almost a passion. Their drawings of hands are still considered masterpieces of all time.

THE LEG

A glance at the human skeleton will reveal that the arms and the legs are rather similar in construction. Like the arm, the leg is made up of three bones. In the upper part of the leg, there is one bone, *femur,* that fits into the pelvis. The lower part of the leg is made up of two *bones, fibula* and *tibia,* which, like a two-pronged fork, grasp the foot and give it mobility and security (*Fig. 32*).

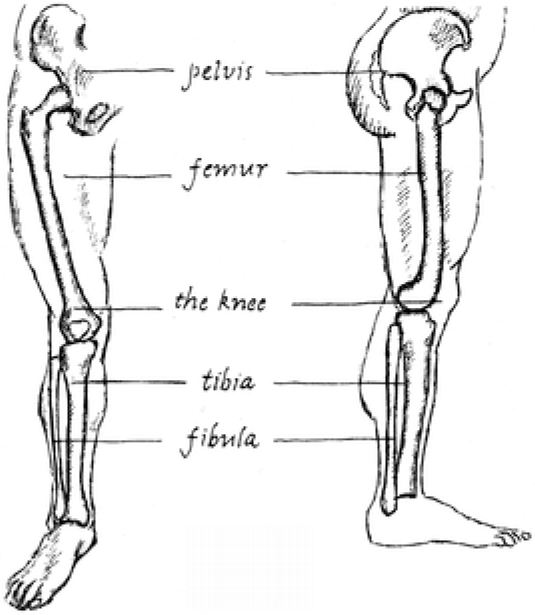


Fig. 32

Everyone is well aware of the bending movement of the leg at the knee, but many people are completely oblivious of the fact that the leg can also be bent sideways (*Fig. 33*). This sideways action is almost as common as the other. When we sit around a campfire or on the floor we usually bend our legs side-ways and tuck our feet under our legs. The old-fashioned tailors used to sit on the table and work for hours, apparently quite comfortable sitting with their legs under them. Hence the name *sartorius,* an Italian name for the tailor’s muscle. Viewed from the front this muscle is quite apparent. It looks like a cord and is attached to the top of the pelvis (the *iliac crest*), then runs diagonally across the leg and fixes itself below the knee to the top of the lower part of the leg (*Fig. 34*).

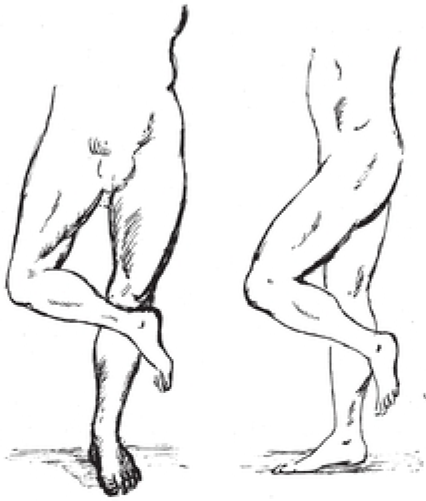


Fig. 33

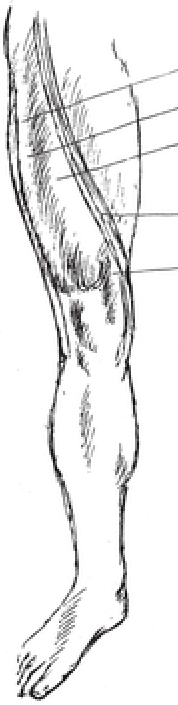

iliotibial band
vastus externus
rectus femoris
biceps femoris
sartorius
vastus internus

Fig. 34

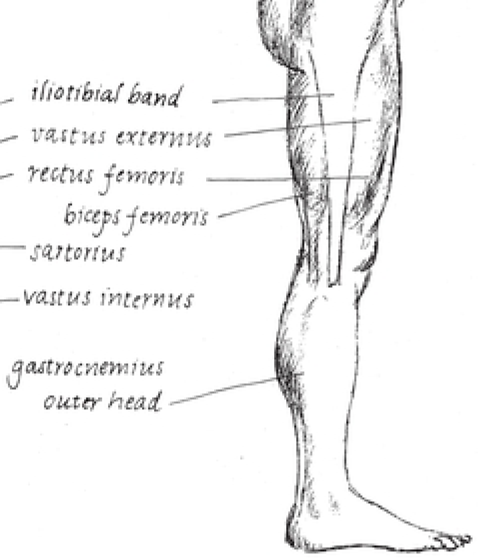

gluteus maximus
gastrocnemius
outer head

Fig. 35

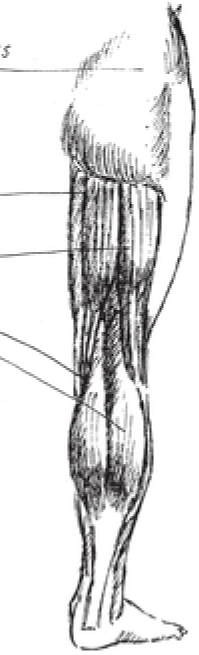

gluteus maximus
semitendinosis:
biceps femoris
gastrocnemius
inner head
outer head

Fig. 36

Fig. 33-*Fig. 34*-*Fig. 35*-*Fig. 36*

Gluteus maximus. *Bends the foot, raises the body in walking*.
Semitendinosus. *Bends the knee and turns the leg inward*.
Biceps femoris. *Bends the knee and rotates the thigh outward*.
Gastrocnemius. *Bends the foot, raises the body in walking*.

Sartorius. *Bends the leg inward.*
Rectus femoris. *Straightens out the leg after it has been bent*.
Vastus externus. *Extends and rotates the leg outward*.
Vastus internus. *Extends and rotates the leg inward*.

Beyond its importance as a muscle capable of performing a specific task, it is of interest to us because it affects the foreview contour of the leg. Together with another structure, the *iliotibial band* on the other side, it forms a sort of sling in which the lower part of the leg is embraced.

The muscle which bends the leg back into its normal standing position, after it has been bent at the knee, is called *rectus femoris.* It is important to an artist because it conditions the profile of the upper part of the leg *(Fig. 35*). It forms a strong yet graceful curve from the pelvis to the knee, bulging out considerably beyond the knee and the lower part of the leg.

The two very important muscles in the back of the leg attach themselves to the lower part of the pelvis and below the knee (*Fig. 36*). These muscles are responsible for bending the knee. The one on the inside, *semitendinosus,* attaches itself to the inside bone of the lower leg, the *tibia;* the one on the outside, *biceps femoris,* attaches itself to the outside bone, the *fibula.* Thus another sling is formed in which the lower part of the leg is suspended.

Another strong and very prominent muscle, *gastrocnemius,* with its inside and outside heads, is very important because it conditions the shape of the calf. At one end it attaches itself to the upper part of the leg, and at the other it is attached by a strong band (tendon) to the heel.

It should become apparent that neither the leg nor the arm can be drawn as two separate ovals (*Fig. 37*), for in each case the muscles join the bones together and form a strong and continuous link with the rest of the body. Unlike the arm, however, the leg is not widest at its middle joint, the knee. It is widest at the top of the thigh, narrows down at the knee, widens again at the calf, and tapers off gracefully at the ankle (*Fig. 38*).

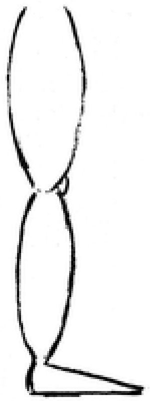


Fig. 37

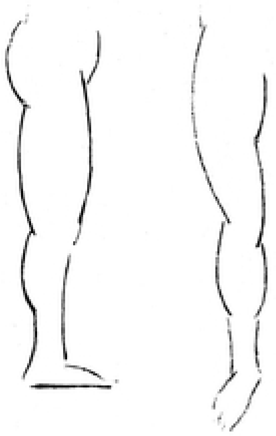


Fig. 38

The shape of the leg is not symmetrical. To the artist its form is complicated and fascinating—complicated because every bone, tissue, and muscle work together harmoniously and swiftly; fascinating because the leg presents a series of interweaving and logically related shapes that constantly challenge the artist’s imagination.

In a normal standing position, when viewed from the side (*Fig. 39*), the heel of the foot is approximately in line with the buttocks. If the heel is pushed too far back, the body will tend to fall forward; if pushed too far in the opposite direction, the body will tend to lean backward.

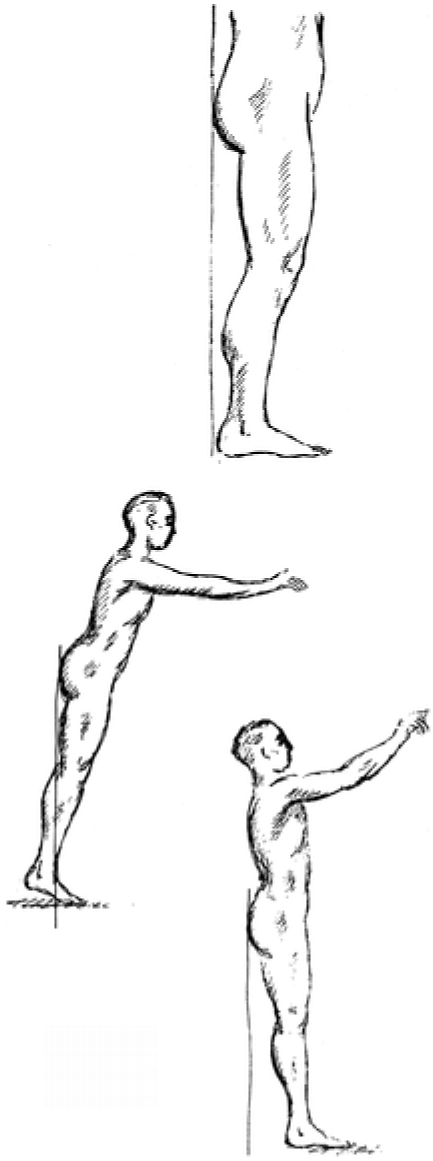


Fig. 39

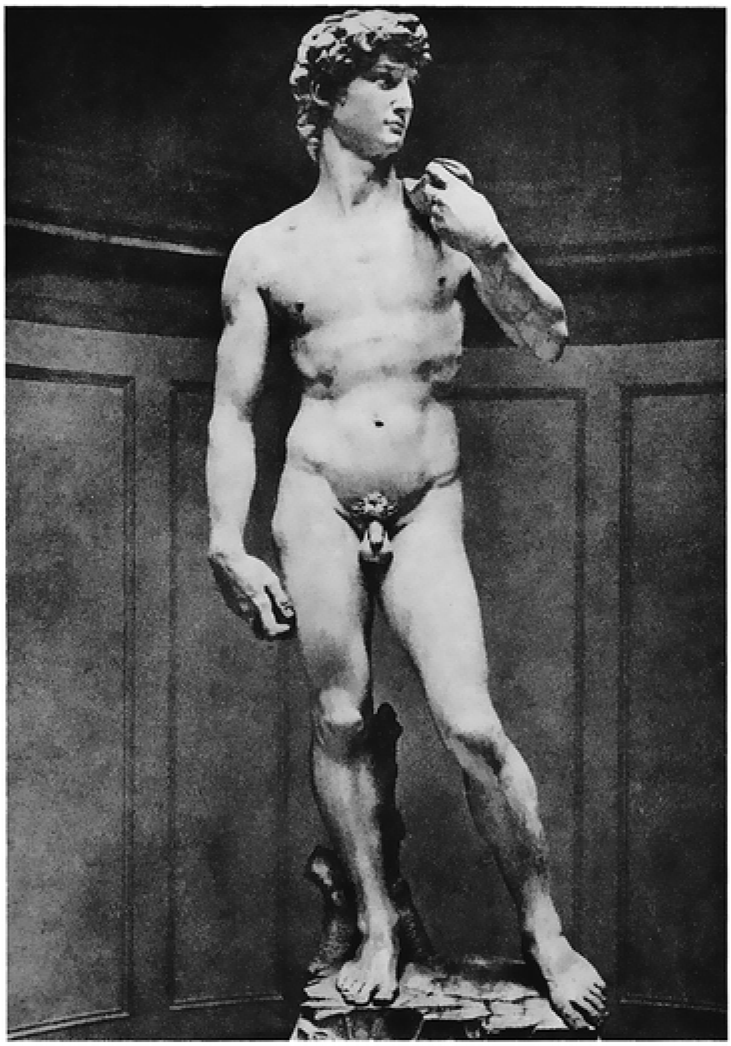


Fig. 40. Michelangelo. David

When one leg carries the weight of the body, the upper part will tend to press down on the lower. Then the muscles of the lower part of the leg will react to the added burden and become slightly thicker and harder, and the leg thus burdened will appear to be shorter than the other. The knee will be pushed up. Viewed from the back or the front, the leg that carries the weight moves outward at the hip and inward at the foot in order to achieve a greater balance. The pelvis above it is pushed up, and the *external oblique* muscle will tend to curve outward (*Fig. 40*—the entire weight of the figure supported on its right leg).

THE FOOT

It is remarkable indeed that a base as small as the foot can support the whole weight of the body—often 200 pounds or more—and that it can do this even on its toes. Such balance is achieved only after we have learned to shift our weight properly. This is by no means an instinctive process but is learned when, as infants, we go from the crawling to the walking stage.

The foot is not an inert form, a plaster platform that cracks under strain. It has a spring, a rather high arch, and an ability to shift its burden as it moves.

The shape of the arch is obvious at a glance. It rises on the inside, and it disappears on the outside where the foot is rather flat (*Fig. 41*). The function of the arch is the same as in architecture, to distribute the weight, and to displace it from the center toward the sides. In drawing a foot, it is advisable to keep this sense of architectural construction in mind.

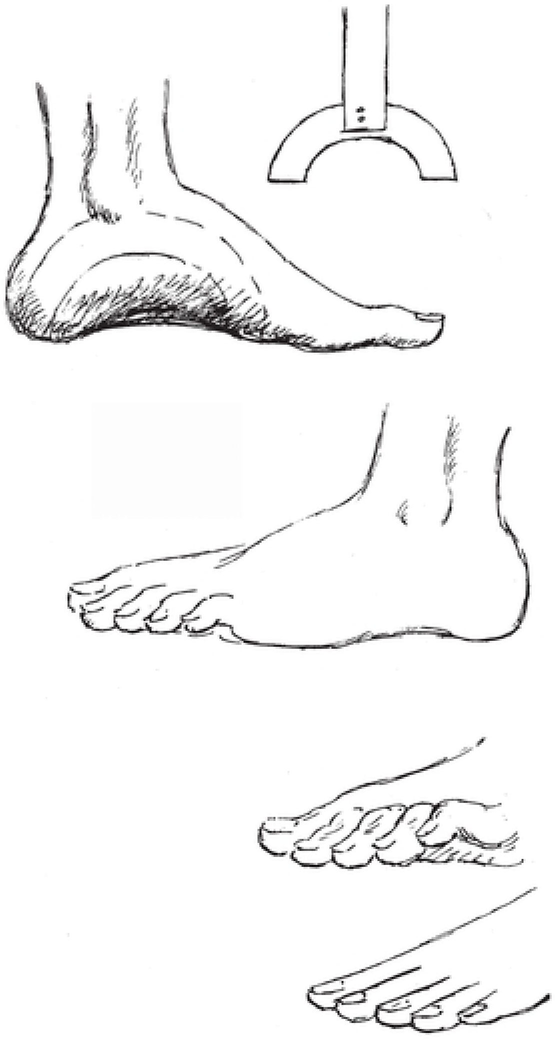


Fig. 41

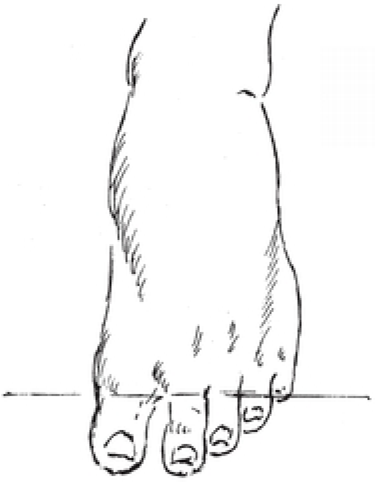


Fig. 42

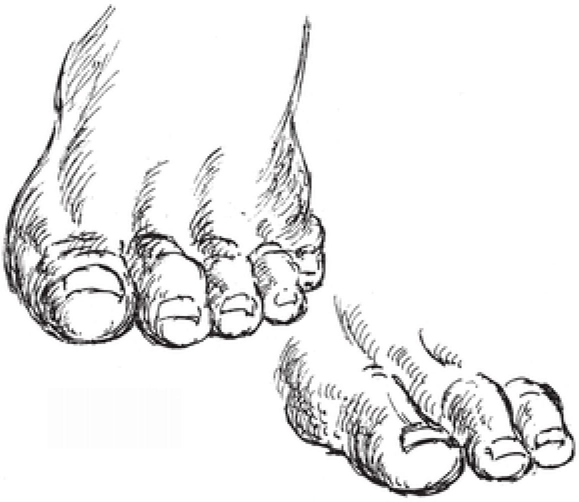


Fig. 43

A bird’s-eye view of a foot is shown in *Fig. 42*. The small toe ends approximately at the point where the big toe begins. In classical drawings the second toe is the longest.

It is important to observe that while the big toe lies flat, the other four curve upward a little before touching the ground (*Fig. 43*). The small toe, viewed from the outer side, is raised somewhat higher than any of the others. Students often struggle to make a foot look natural without ever realizing why they fail. The trouble usually lies in their drawing the toes straight. Be sure to give them a slight lift before bringing them down.

In describing the muscles I have tried to avoid the scientific names and terminology used in books on anatomy. But since some of these terms are fairly widely used, I thought it might be helpful to define the most common ones.

Flex means “to bend.” For example, *ulnar flexor* of the wrist is a muscle that bends the hand.

Extend means “to stretch out or unbend.” For example, *long radial extensor* of the wrist is a muscle that stretches or unbends the hand.

Abduct means “to draw away from the median line of the body.” For example, the *deltoid* is the great abductor of the arm; it raises it up, away from the side.

Adduct means “to draw toward the median line of the body.” For example, *pectoralis major* is a powerful adductor because it draws the arm to the mid-line of the body or brings it down after it has been raised.

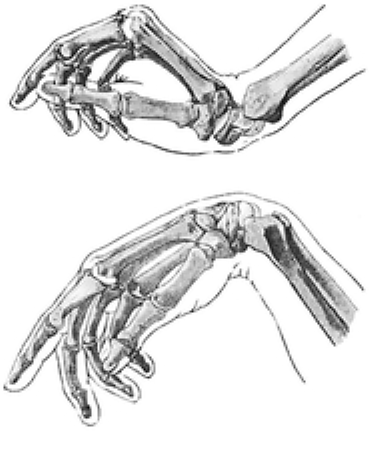
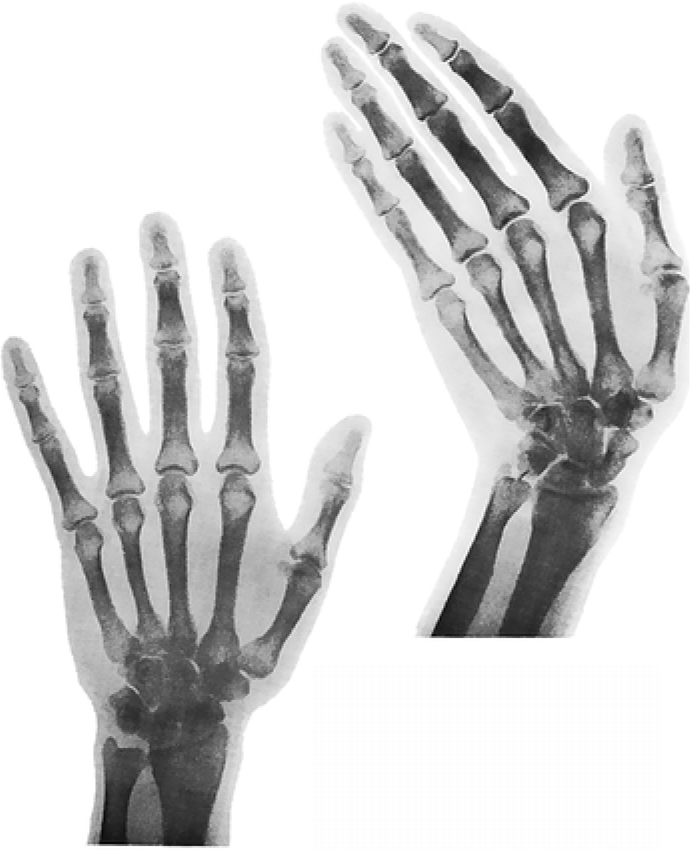
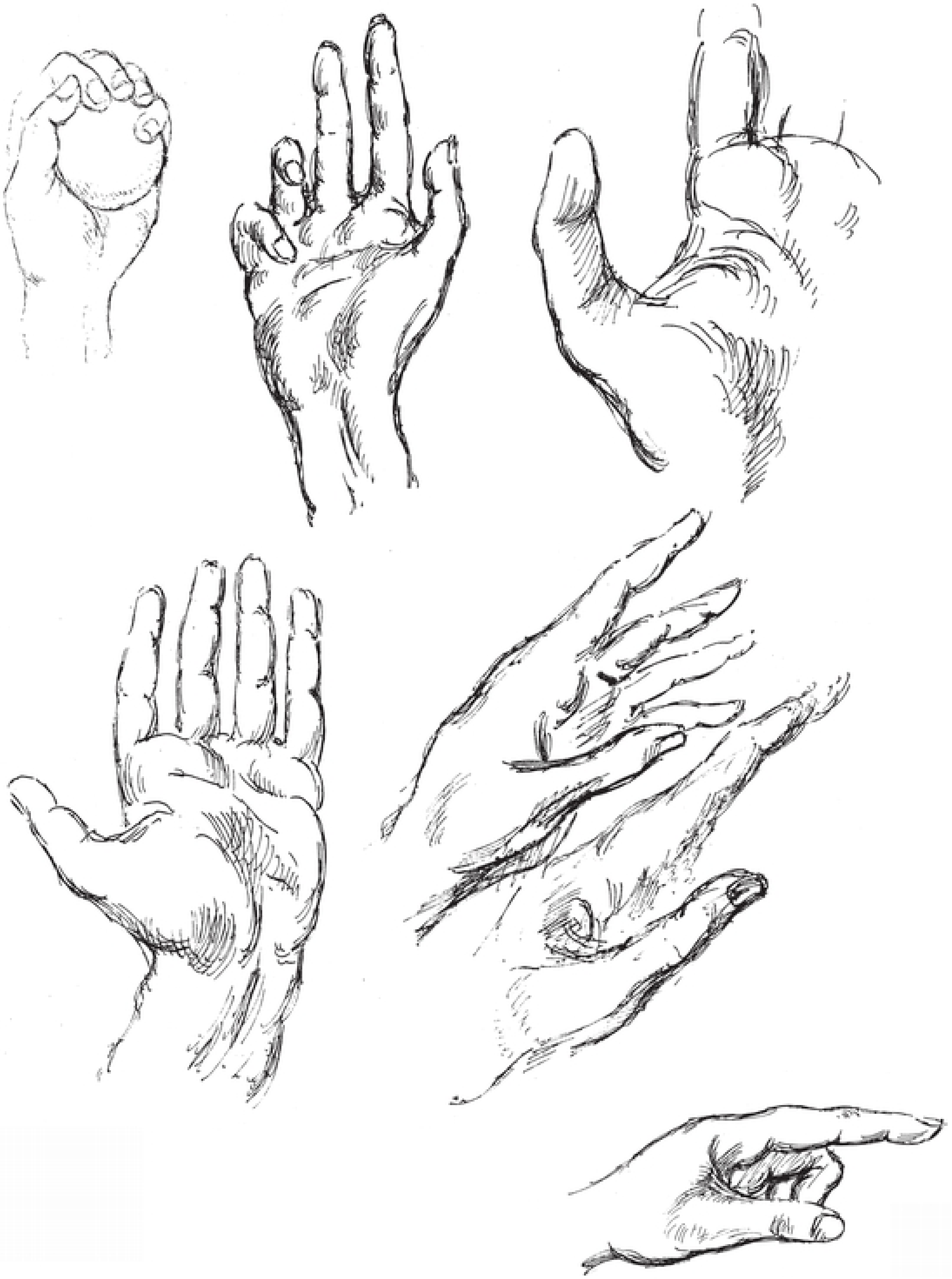


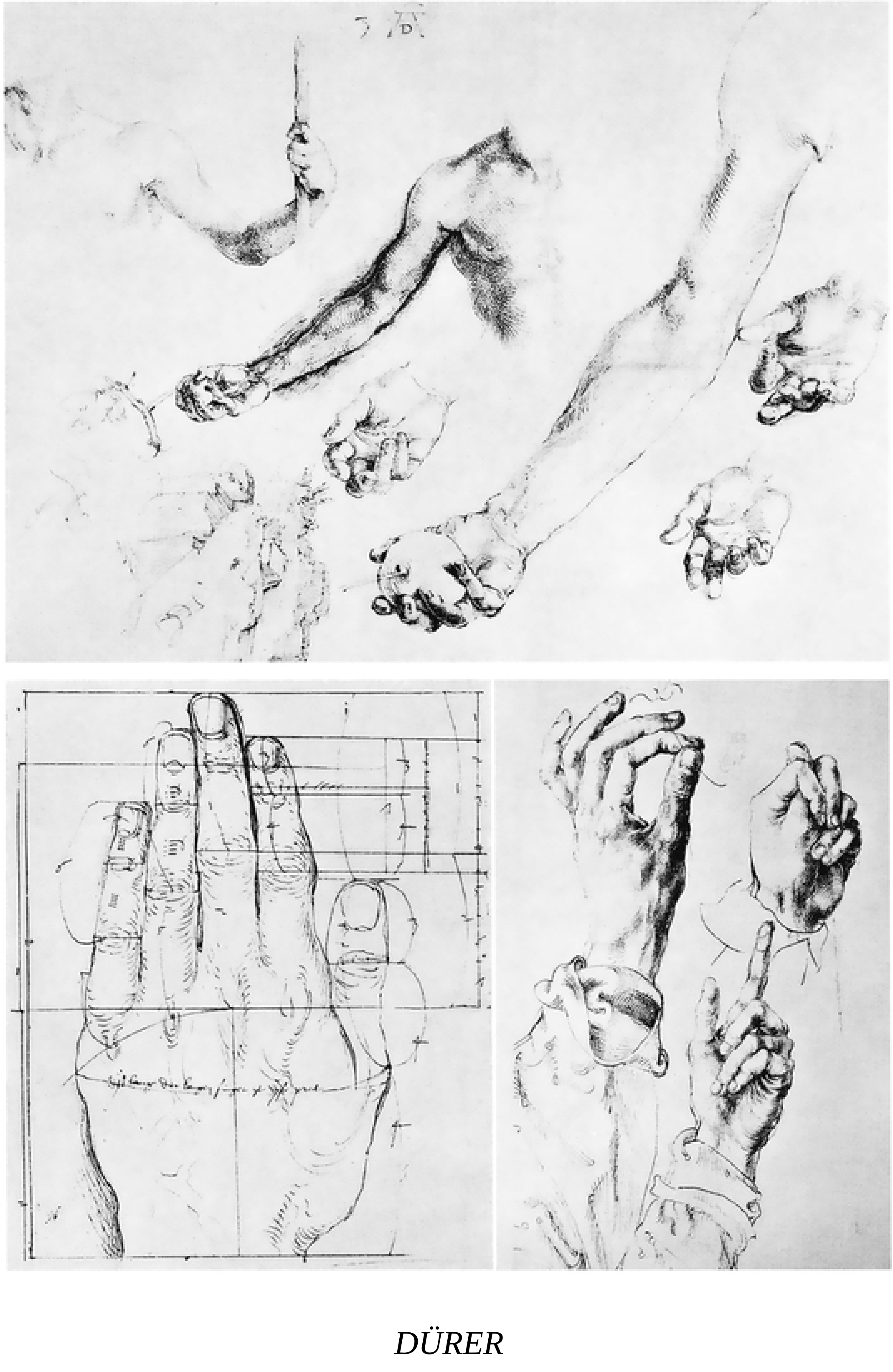
Diagram showing the skeletal construction of the hand in two bending positions.



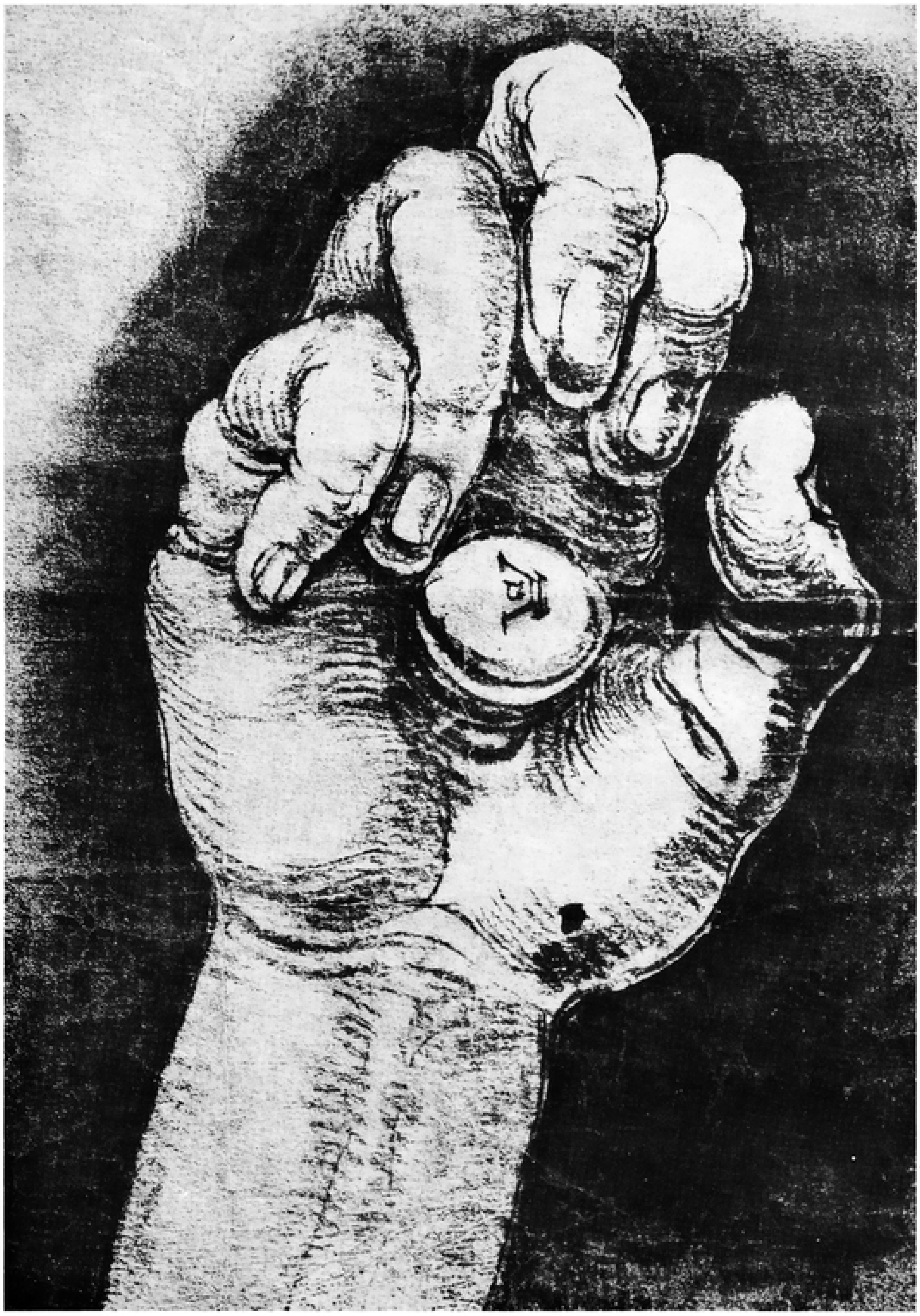
X-ray pictures of the hand, showing the wrist and the bones of the fingers.



DOBKIN



DÜRER



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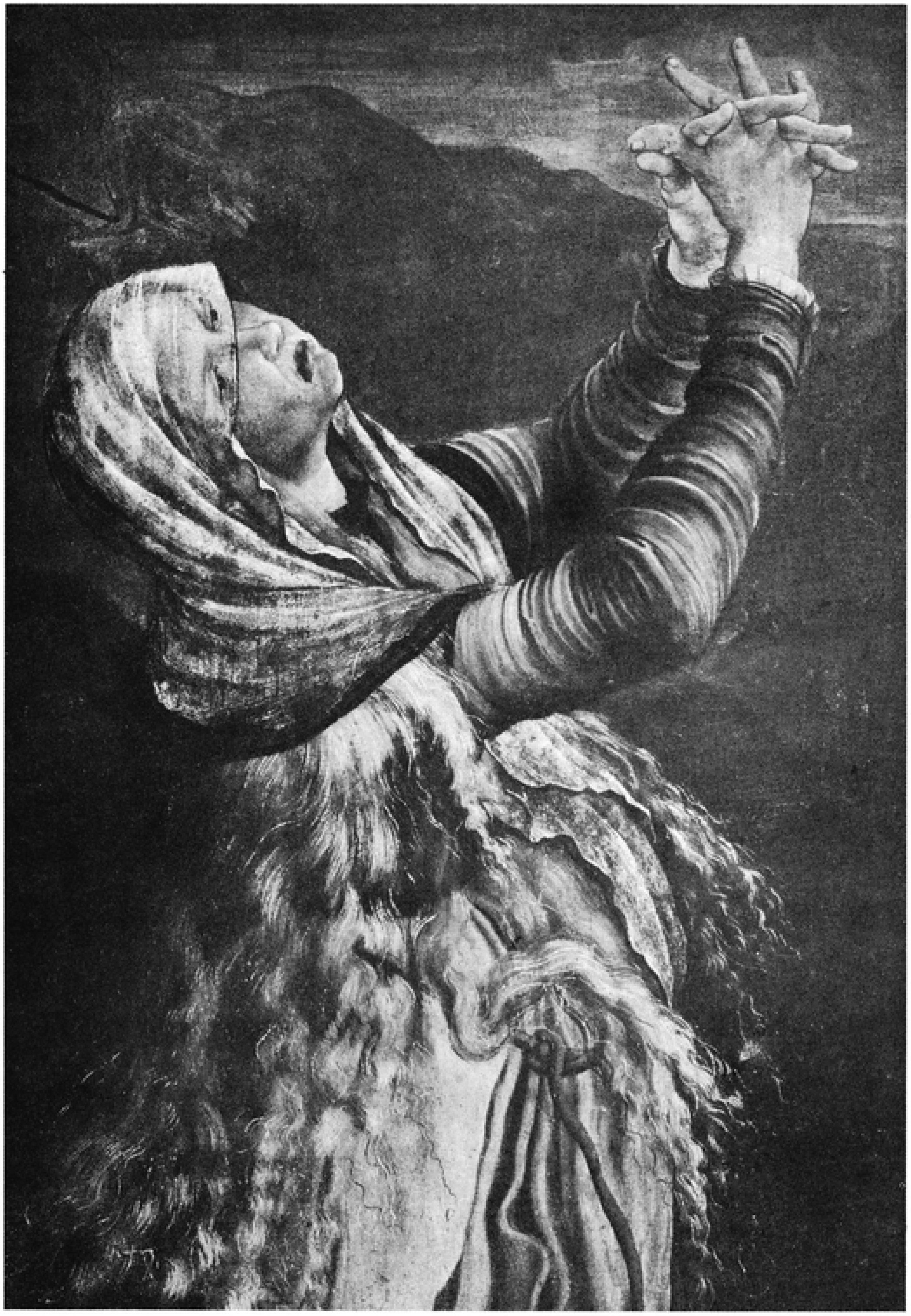
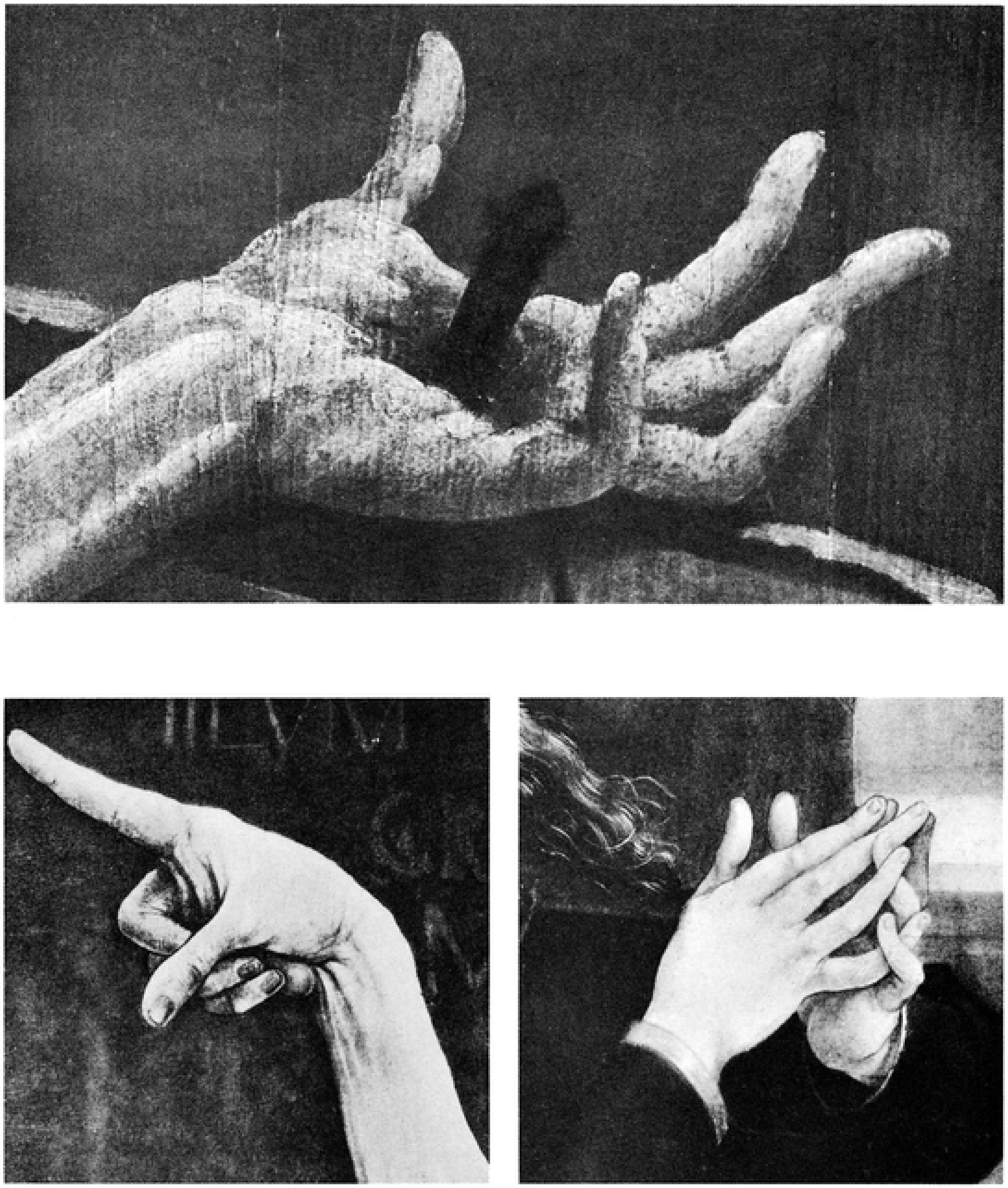
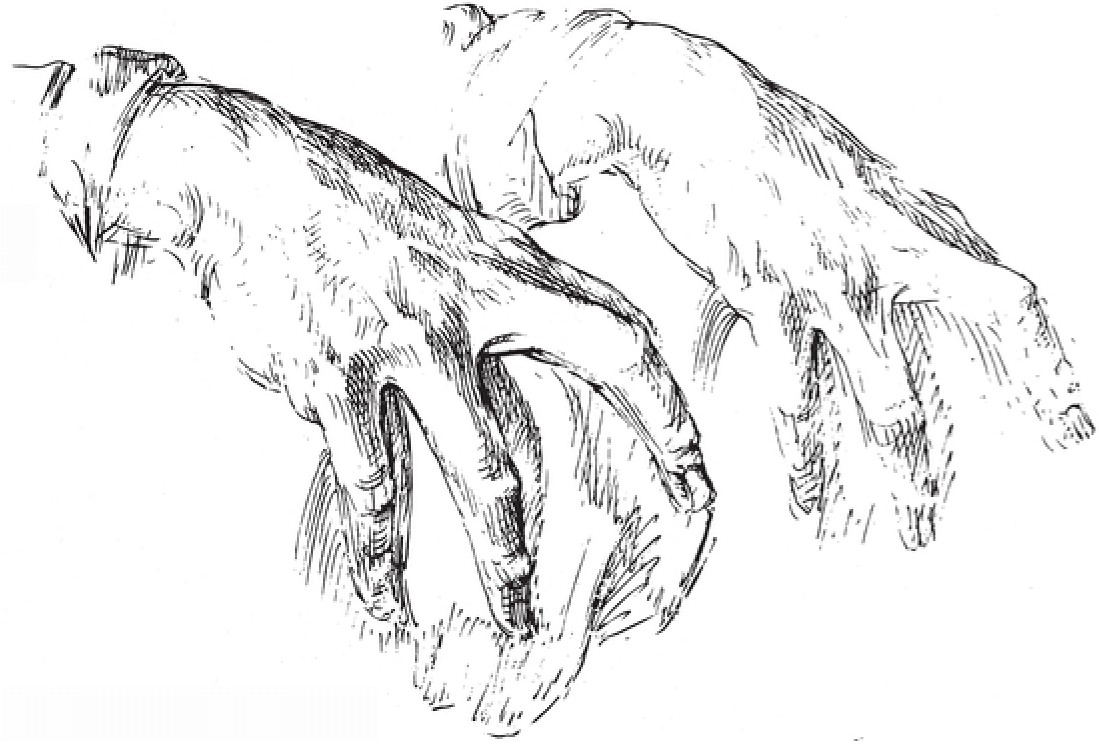


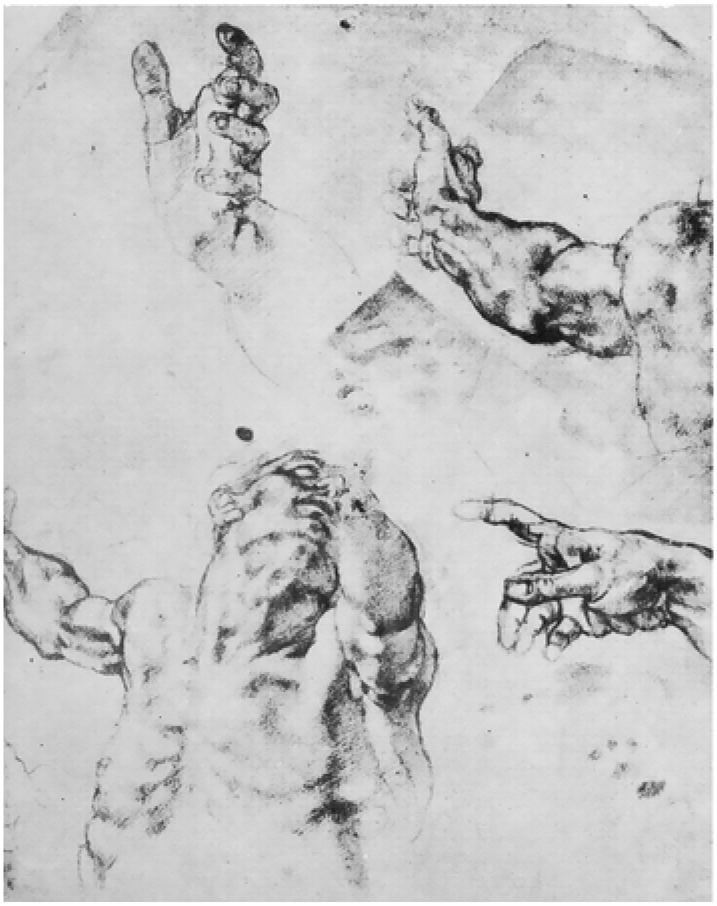
GRÜNEWALD

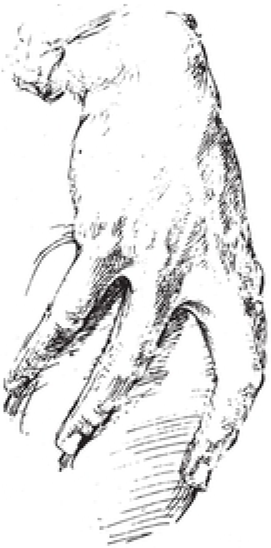


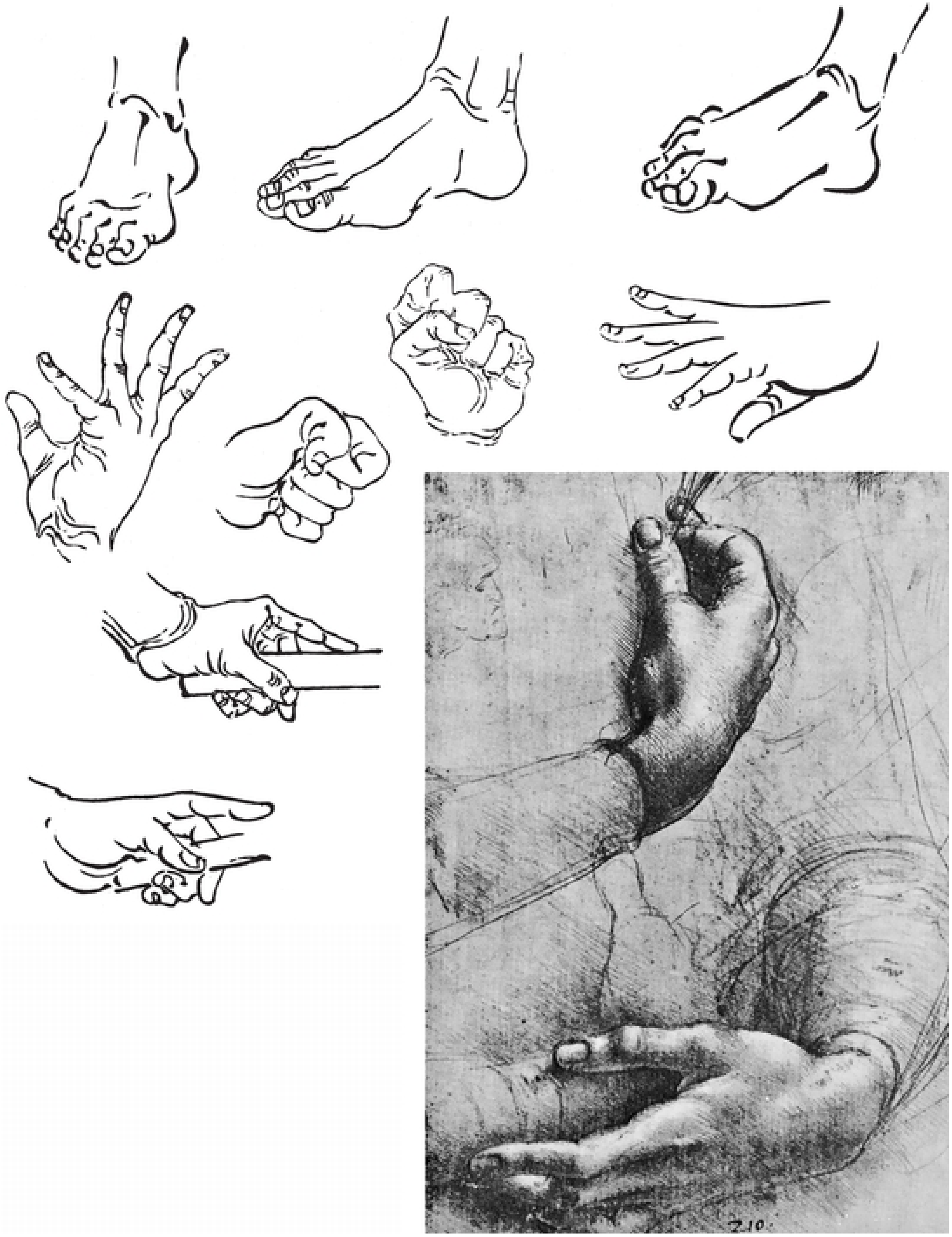
GRÜNEWALD. The philosophy of calm, classical beauty of Renaissance Italy has always been foreign to the realists of Northern Europe. Their reaction to tragedy was much more immediate and emotional. Every detail of the painting from which these hands are taken is filled with the drama of the crucifixion. In this sense both Dürer's and Grünewald's hands are closer in feeling to those of Hokusai than to Leonardo da Vinci (see p. 59).



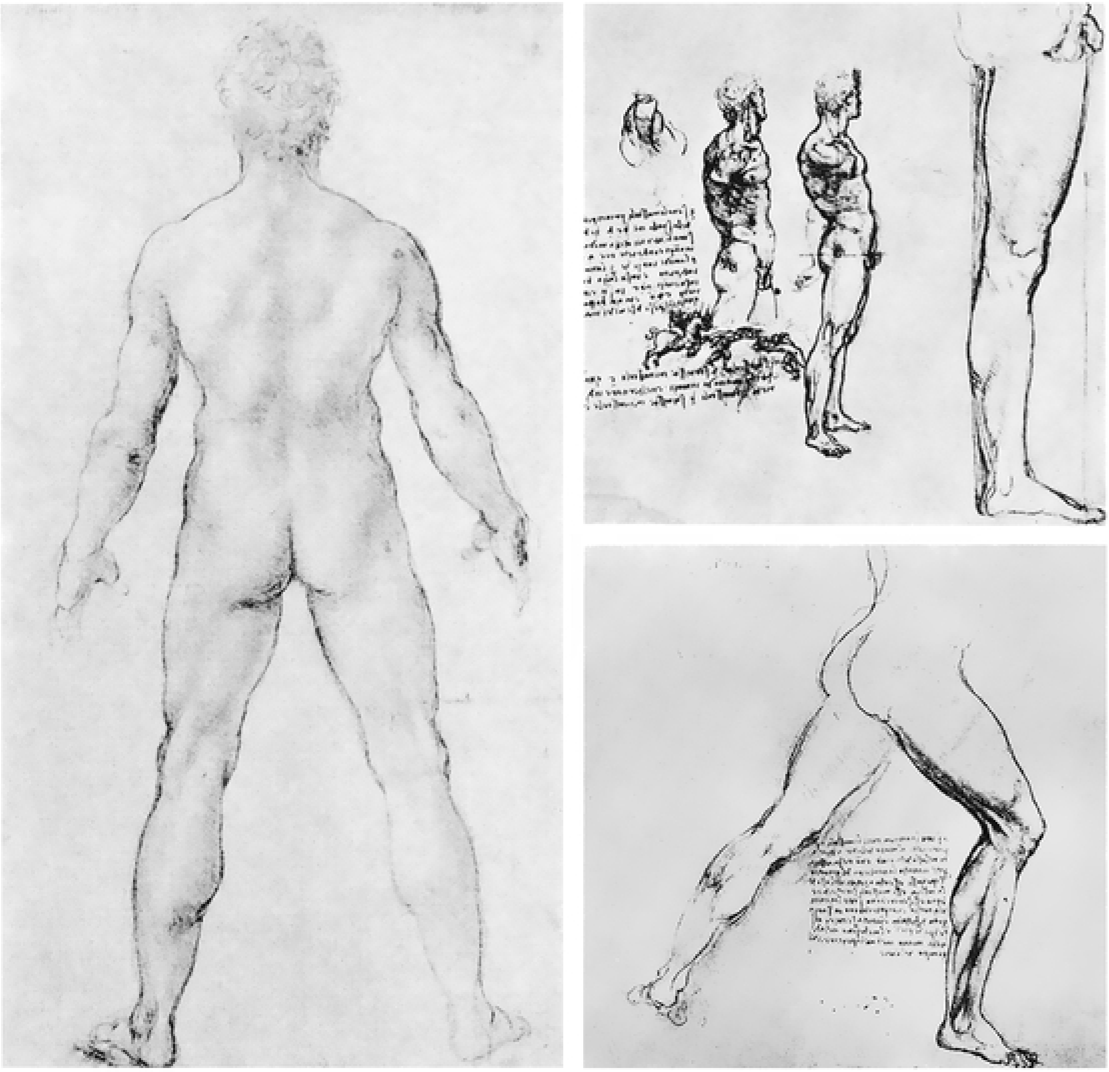
MICHELANGELO. Study for Sistine Chapel frescoes.



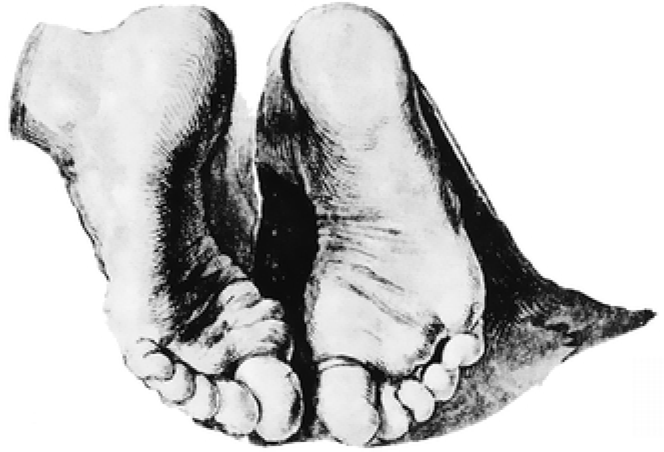




The striking thing about the drawings on this page is the difference in approach to the same problem. Hands fascinated both artist Hokusai in the East and Leonardo in the West. But while the Italian was the product and a leader of Renaissance classicism, the Japanese artist knew little and cared less for the Greek ideal of beauty. Keen observation of split-second *movements of the fingers and their expressiveness dominatés Hokusai's art, while grace, placidity, formality, and an objective attitude motivate da Vinci's drawings.*

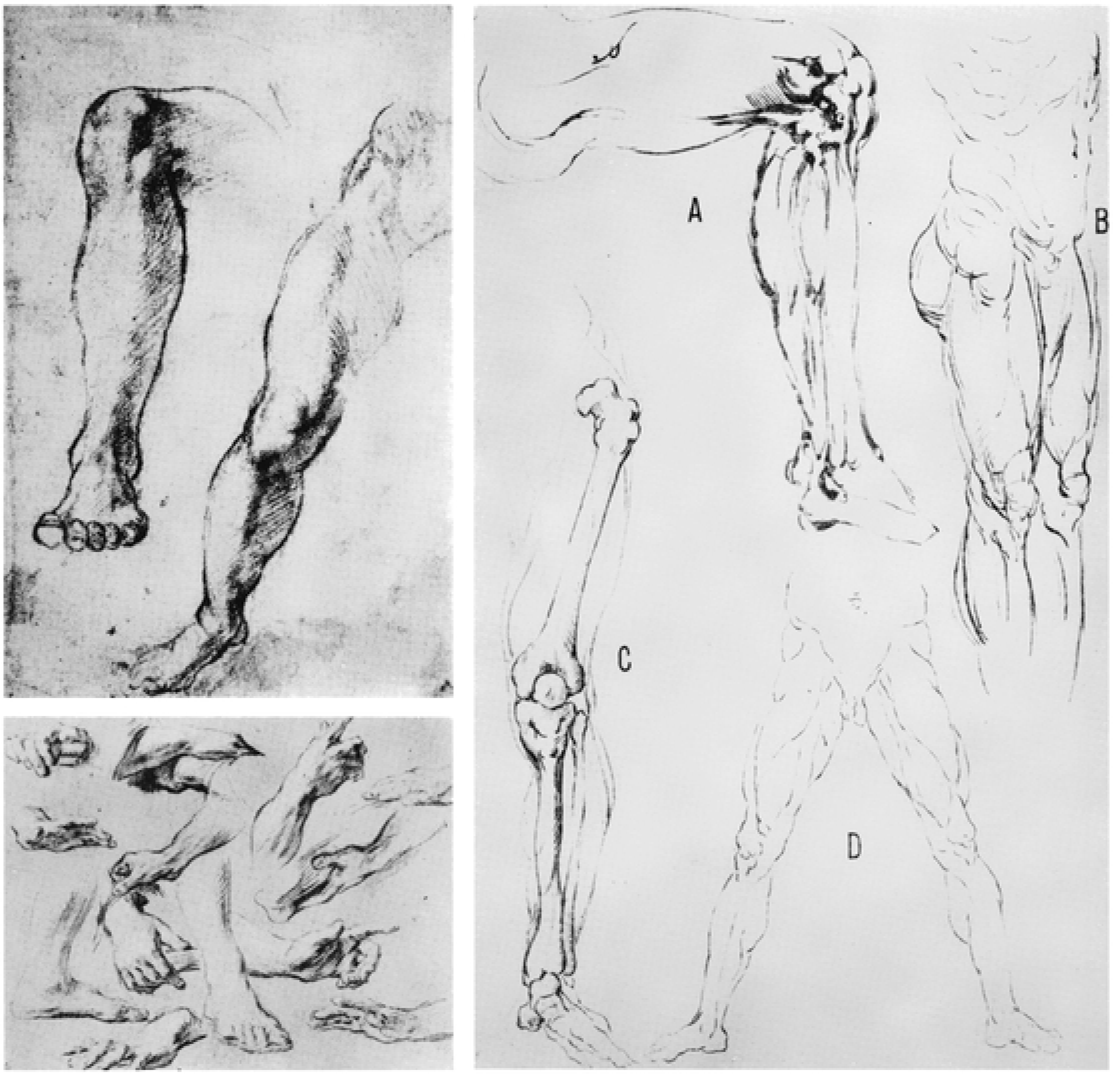


LEONARDO

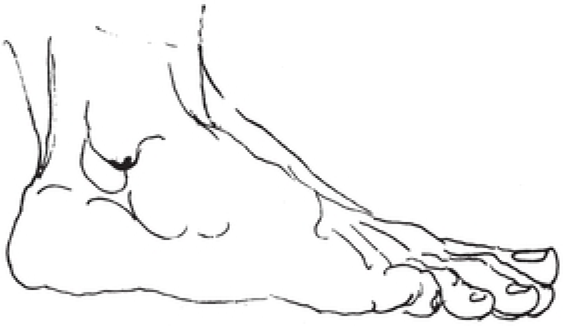


DÜRER

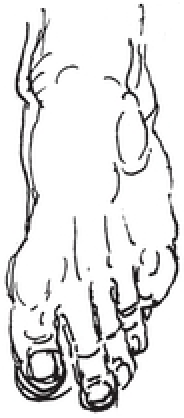
MICHELANGELO

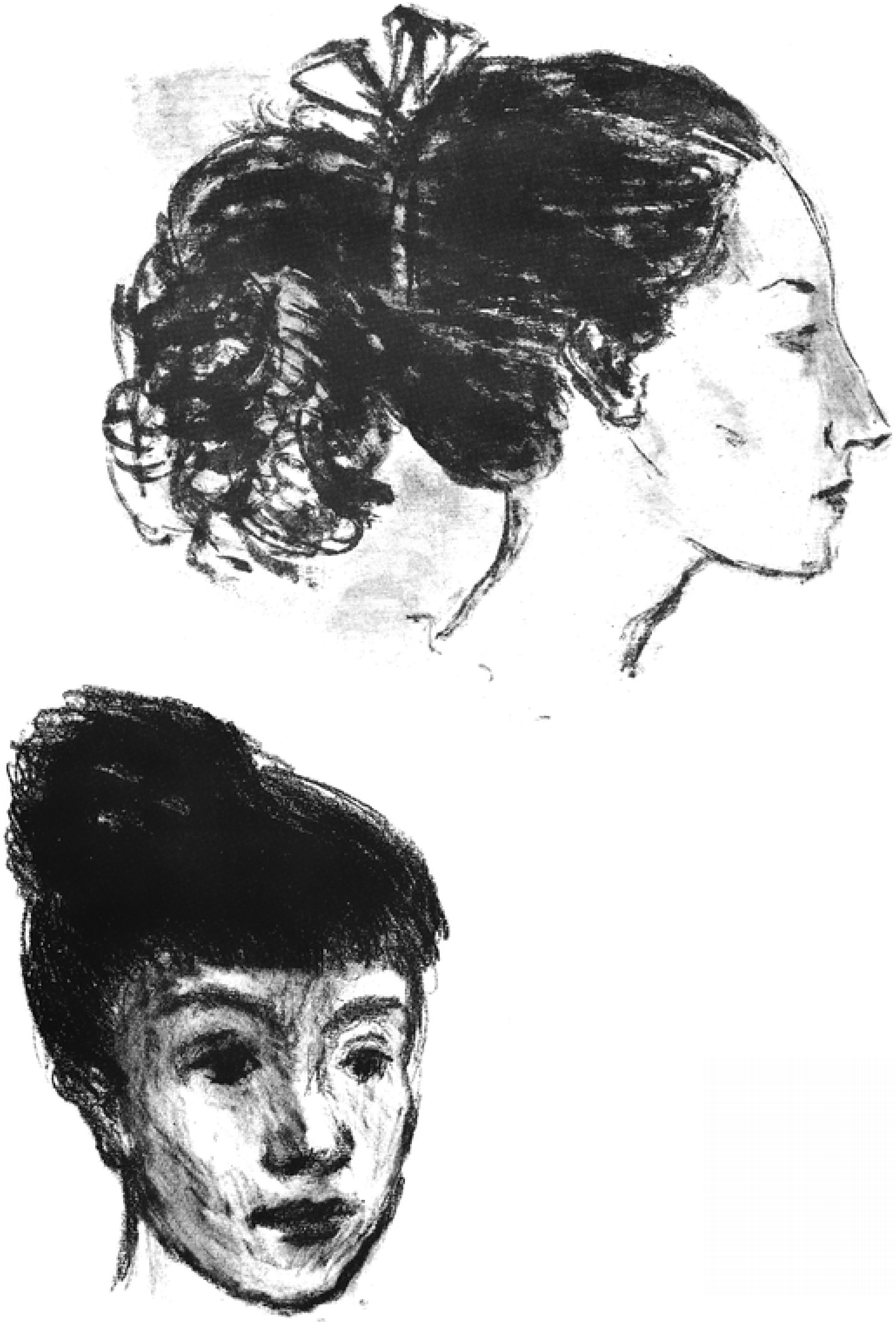


WATTEAU



DÜRER

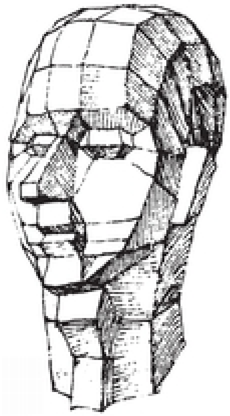




DOBKIN

Head and Neck

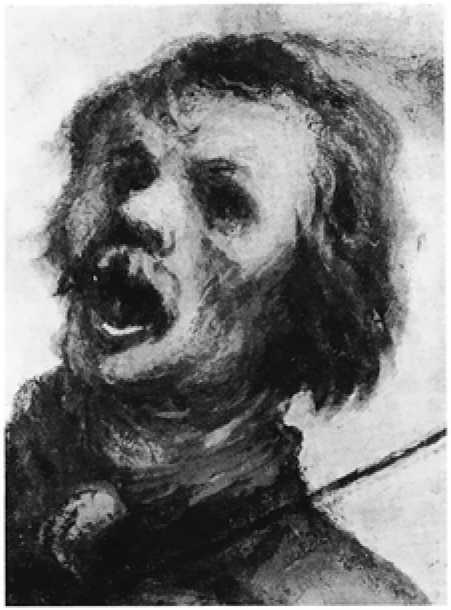
DÜRER



“EVERYONE sees at once the features of the face,” wrote the famous critic, Roger Fry. “We are trained for this by the pressing need of reading its expression. No one but an artist who has cultivated the contemplative vision ever sees the head or can ever grasp the idea of the volume of the whole head and the relation of mass to skull.” (See Daumier below.)

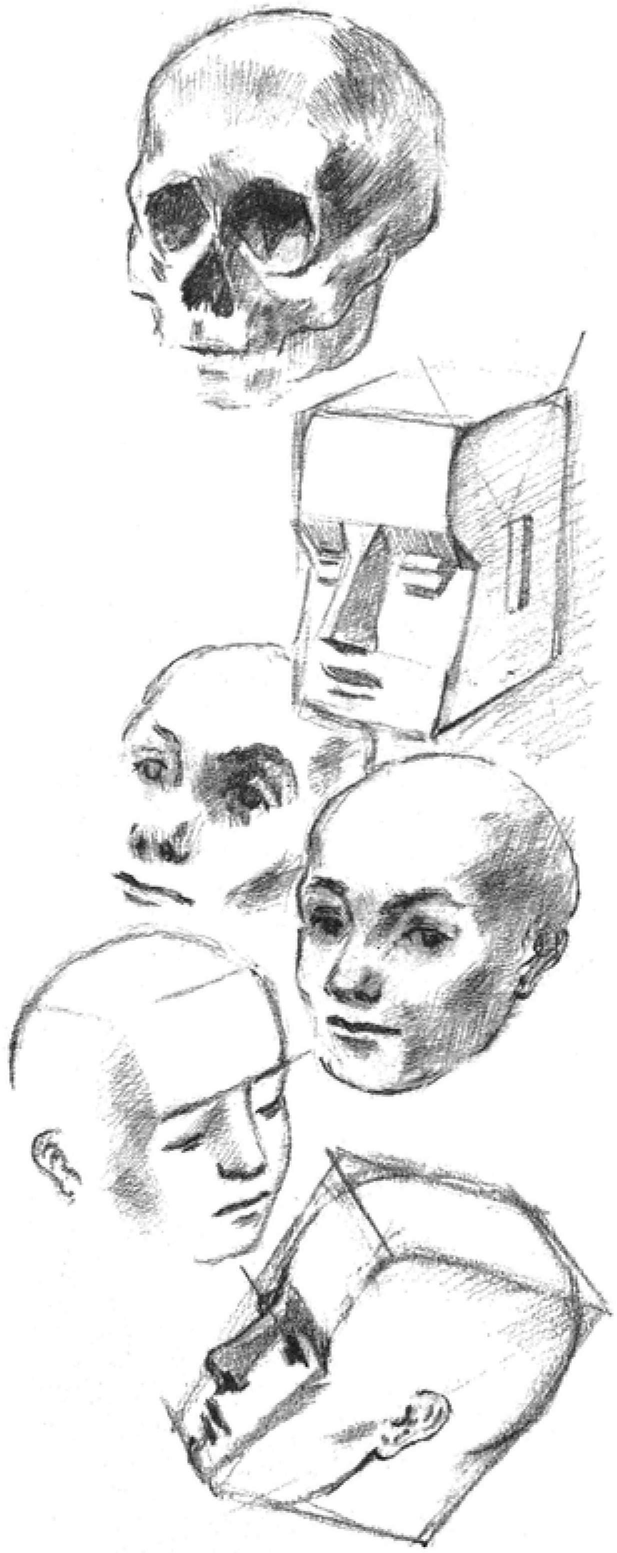
But important as “the volume of the whole head” may be, there is another aspect of the skull that merits attention. This is that the entire shape of the skull contributes considerably to the character of the face. Like the face, it varies with every individual. It can be larger, longer, or broader, and presents infinite possibilities of interpretation.

Artists and students often start out with a simple solid that serves as a basis for drawing the complicated forms of the human body. Legs, arms, and neck are often derived from cylinders, and the torso from a cube. One reason for this practice is that when one creates, speed is often a factor. Obviously, it is faster and simpler to indicate an arm by a line or a cylinder, and a head by an egg, than to draw full-fledged forms containing the muscles and features. Sometimes an artist will merely rough in a figure, for several tries may be necessary before it is finally placed in the desired relationship to the space and to other figures or objects in the picture. For an artist works with abstract forms in space despite the fact that his eventual product may represent people or suggest reality. Another reason for starting with simple forms is that a body built upon these forms will be more massive and sculpturesque.



DAUMIER

Dobkin. Head derived from the block.



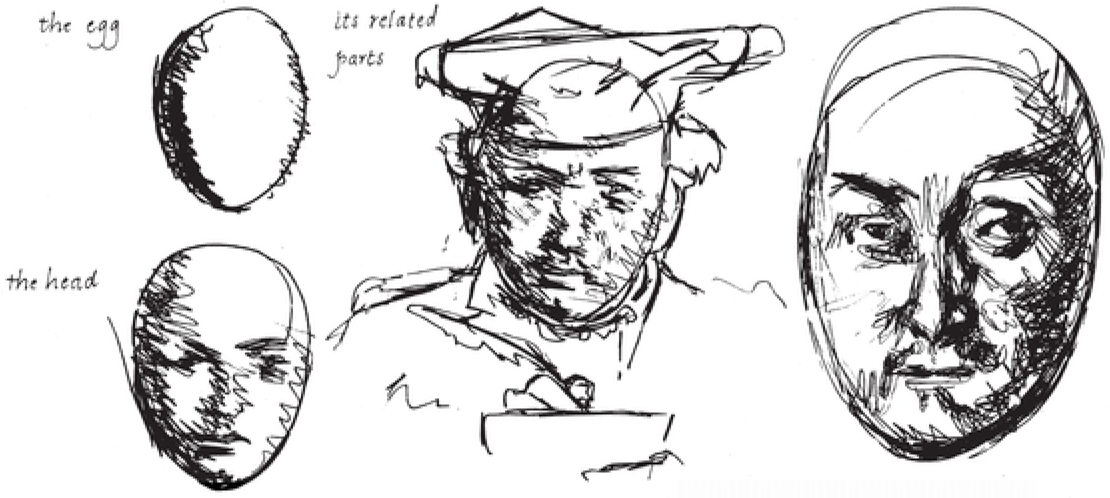
Dobkin. Head derived from the block.

Many artists and teachers are at variance as to what form to use, and some are even opposed altogether to starting with a simple geometric shape. Among those in the former group, some say a block should be the basis for the head, while others advocate an egg shape. In my work I generally indicate a head by an egg, although in art school I was taught to use the block. Since the authorities are fairly evenly divided, I thought it advisable to present the arguments for the use of both the egg and the block, and leave the student free to choose which method suits him best.

In a rectangle a little higher than it is wide, the place of the features can be determined by dividing spaces into halves (*Fig. 44*). The line crossing the eyes cuts the rectangle in half. The lower half of the rectangle is itself cut in half by a line running through the base of the nose. The lower quarter is again divided in half by a line drawn through the bottom of the lower lip. Note that the measurements referred to extend from the top of the skull to the bottom of the chin. No measurements can be taken that include the hair since, of course, the coiffure is a matter of preference. The hairline also varies with each person. (See Botticelli, page 78.)

The features viewed in profile fall into the same relative position as in the foreface. The side of the head, however, fits into a square instead of a rectangle.

It is obvious that the block has some real advantages over an egg. First, its shape is more definite and therefore lends itself more readily to measurement. Secondly, the .laws of perspective can be applied much more easily to a block. If one’s object is to draw the head bending down, one is always more certain of what happens by turning a block into the desired position than by using an egg, whose shape is more elusive.



Levine. Head derived from the egg.

And yet, so far as I know, most artists conceive of the head in the shape of an egg. Somehow, the advantages of a block matter very little to them. They seem to be able to draw the head in any position from experience quite naturally. As one famous American artist put it: “To me a block violates the very concept of the head. We simply never see the head squared off that way, and anything that violates our inner conviction should not be used as a basis for good drawing. I think it is much saner to build a head out of an egg shape because the skull, especially when viewed from the front, is the nearest thing to it.”

Again it should be remembered that all good drawing is freehand. Using any rules rigidly is misusing information that could be of valuable aid. The best way of using such information is to draw freely, perhaps with cer–tain proportions in mind, or to draw without any concern for rules, and only when done—if the drawing seems unsatisfactory—to check back or refer to some laws of proportion.

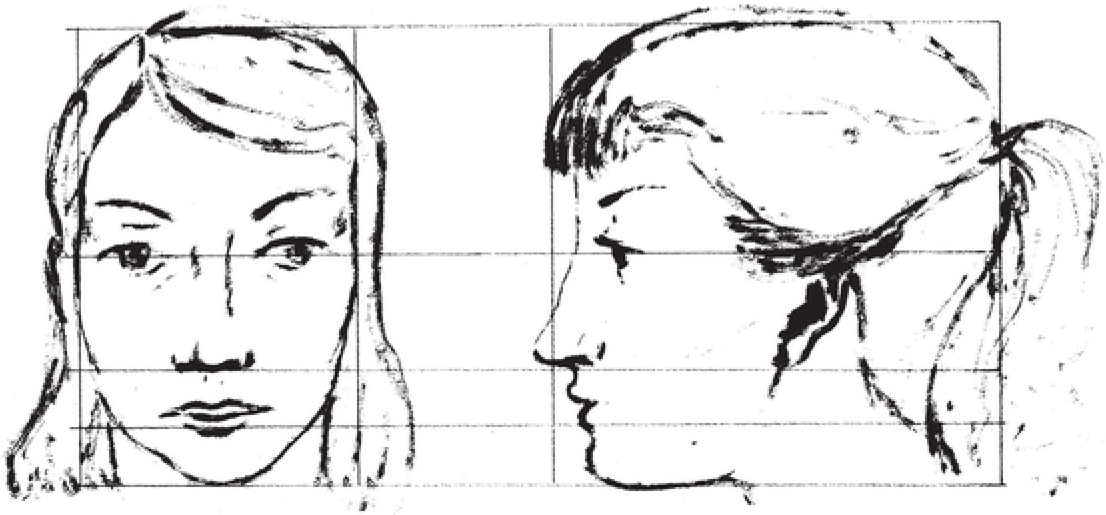


Fig. 44

THE NOSE

The nose is made up of a narrow bony part at the top and widens as it descends. A nar–rower ridge is built into this structure at the base of the bony part and ends in a bulbous tip. The two wings of the nostrils are attached to the sides of this tip. The tip of the nose comes down further than the wings of the nostrils.

There is a slight protrusion at about the middle of the nose where the bony structure of the skull ends and the softer part of the nose begins.

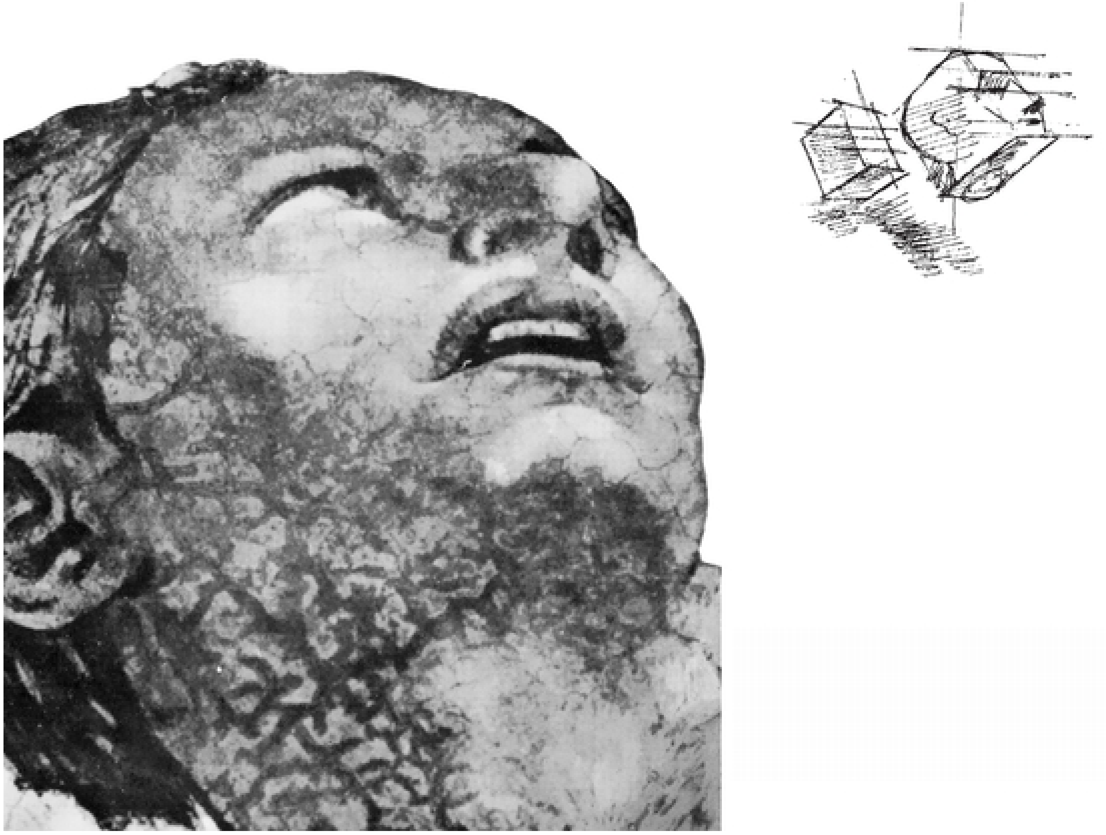
Although the nose is usually narrower at the top than it is at the bottom, some artists prefer to make it the same width all the way down, or even to reverse the usual proportions by drawing the widest portion at the top and the narrowest at the tip.

The shape of the nose varies considerably with each individual. If the likeness of the sit–ter is to be achieved, the shape of the nose should be carefully observed since it is the dominant feature of the face. Together with the eyes and mouth, it is responsible in great measure for the character of the entire face.

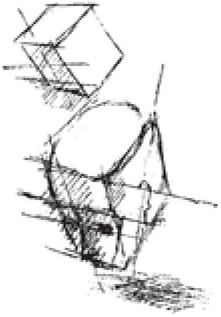
THE EYE

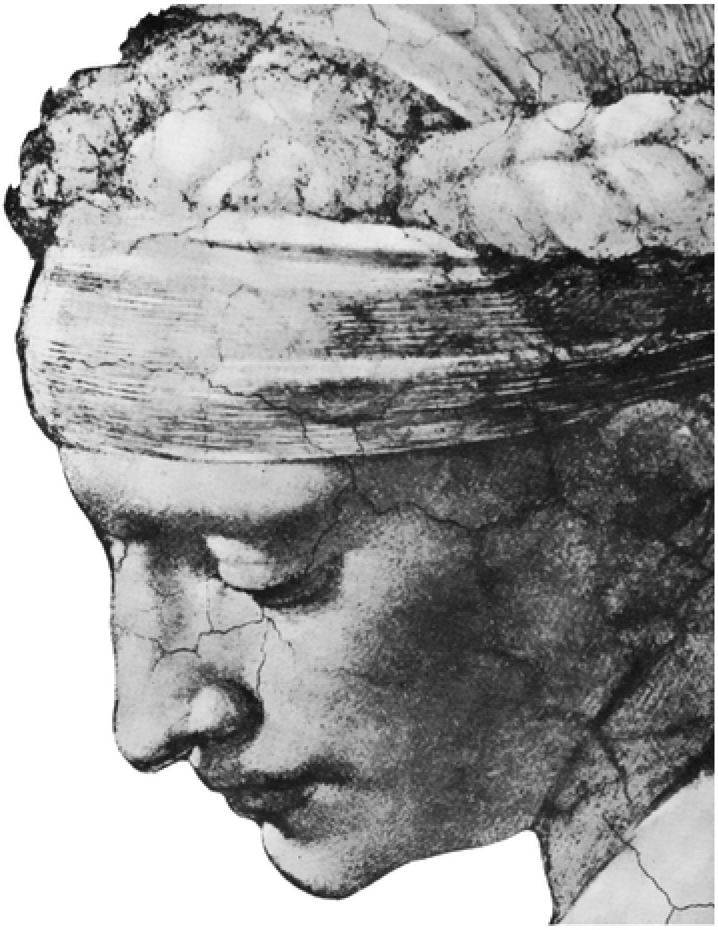
The shapes of our eyelids depend upon the form they rest on. They acquire their curva–ture from resting on the eyeball and not be–cause there is an independent muscle that curves them into a particular shape. Re–move the eyeball and the lids cave into the socket.

When drawing an eye, observe that the iris, the dark circular area of the eyeball, is never completely exposed.



MICHELANGELO. Two heads from frescoes in the Sistine Chapel.





The profile view of the eye is never vertical, but takes a slightly diagonal course. (See also *Fig. 53*, page 69.)

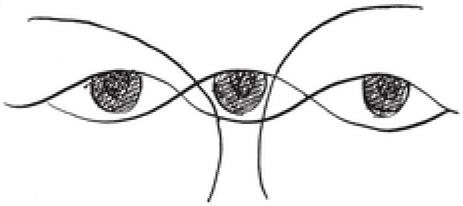
The top lid overlaps the lower one nearest the cheekbone. Near the nose, however, there is no overlapping. Here both lids join in a small curve.

Generally, the space between the eyes is equal to the length of the eye itself (*Fig. 45*). But this space, as well as the shape of the eye, varies with each individual.

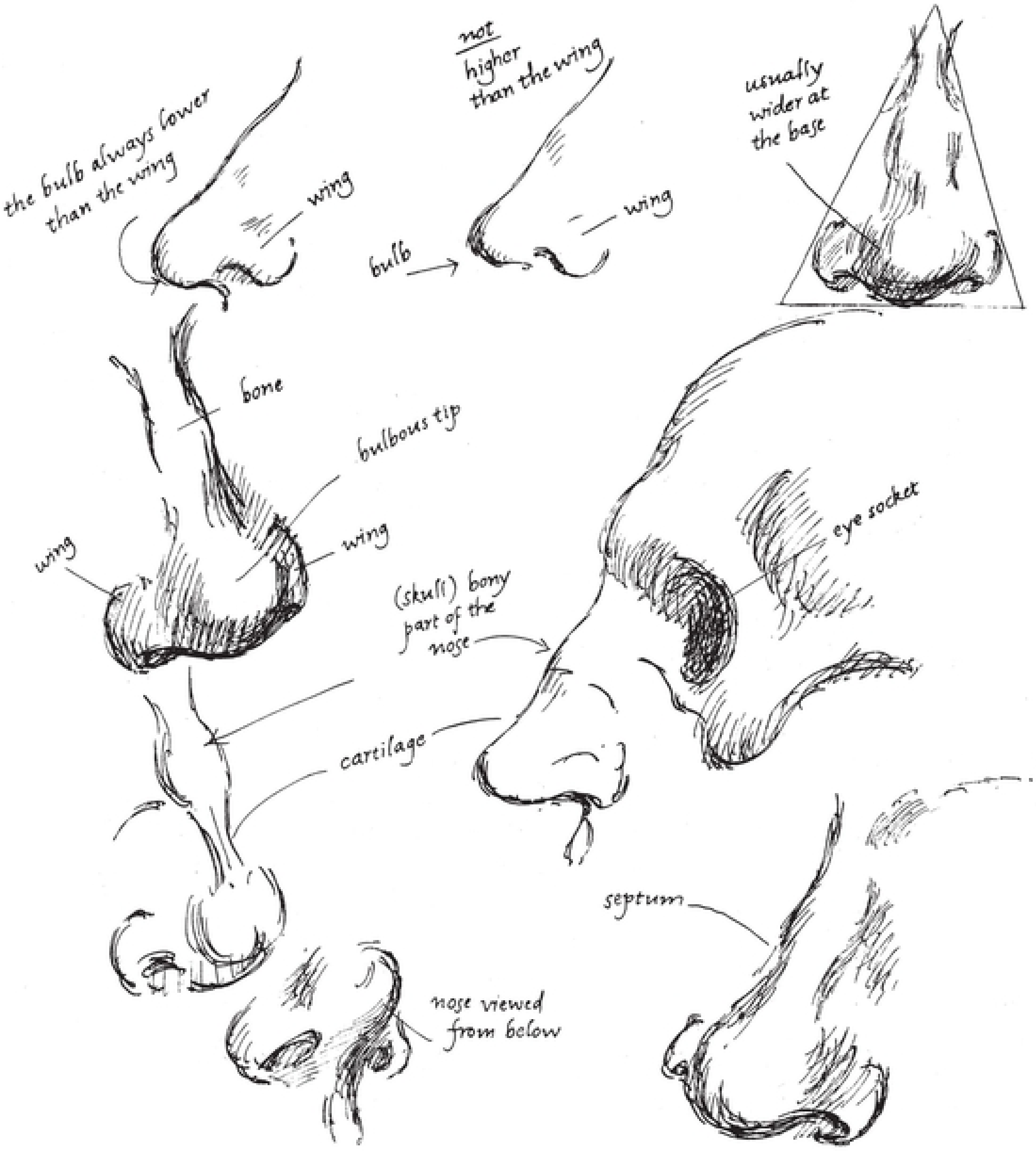
Eyes have a tendency to slant upward away from the nose when the face smiles or laughs (see Rubens, page 70). When the face ex–presses displeasure, the eyes tend to slant down away from the nose (see Messerschmidt, page 73).

So personal is the slant and shape of an in–dividual’s eyes that the slightest change will alter a facial appearance completely. Another important consideration is the setting of the eyes into the sockets. The degree of protrusion or recession of the eyes varies with each in–dividual.

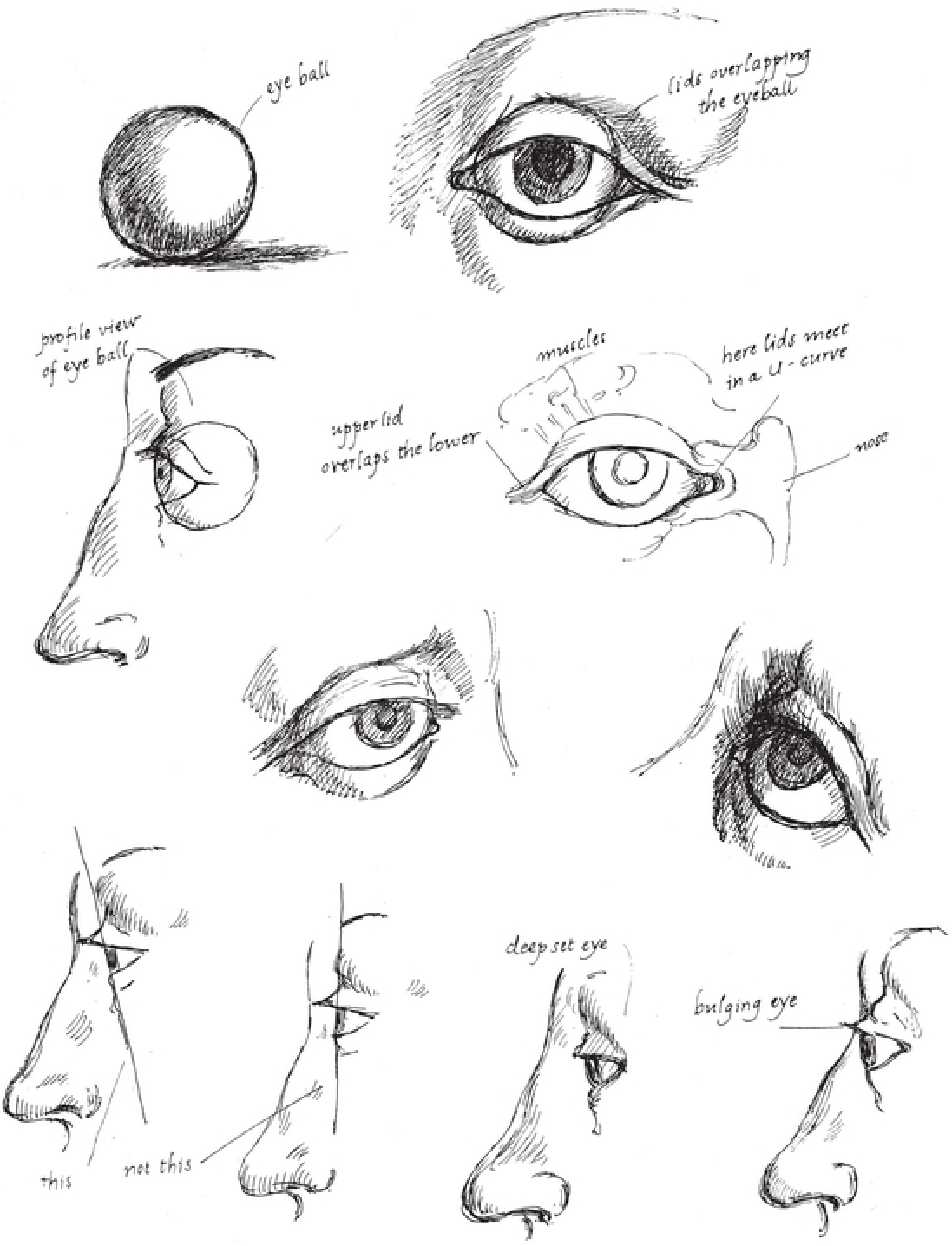
Fig. 45



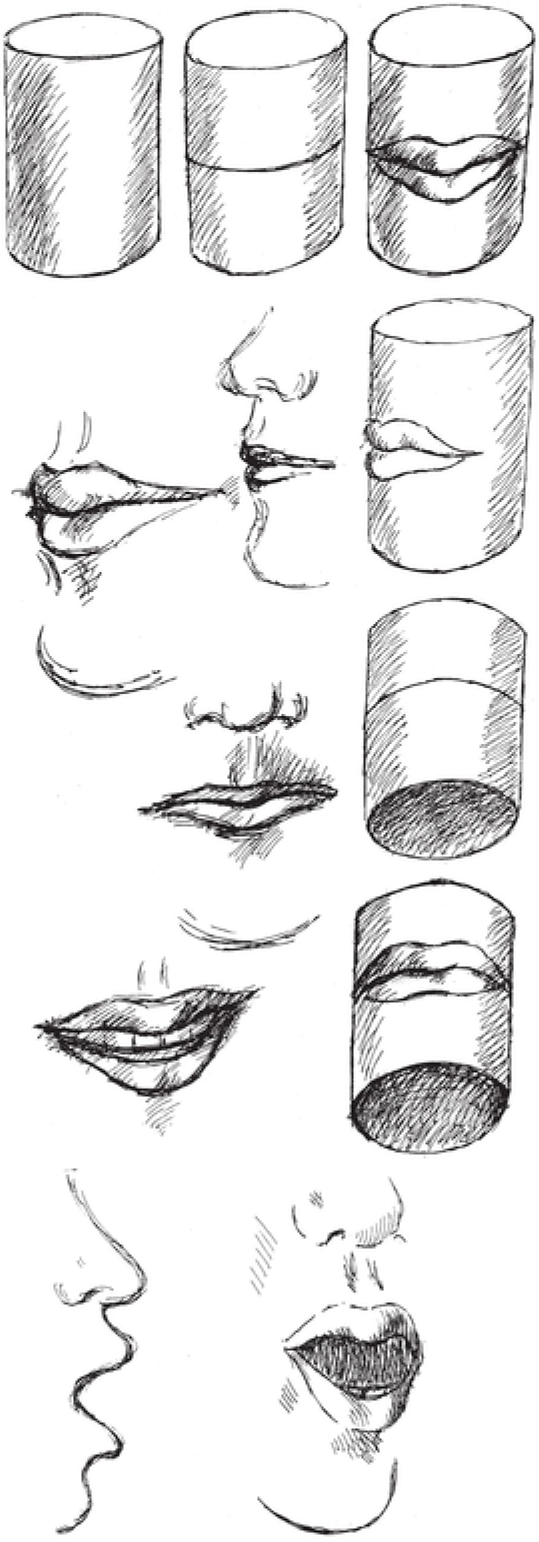
Eyebrows, although they lend a definite character to the eyes, cannot be defined well as to shape and the course they take. They vary far too much. Sometimes they follow the contour of the eyes, but very often not at all. It is advisable, however, not to draw the eyebrows too close to the eyes. For the sake of freedom of drawing, definition, and avoidance of a cramped appearance, it is best to give each feature plenty of room.


the bulb always lower than the wing
wing
not higher than the wing
bulb
wing
usually wider at the base
bone
bulbous tip
wing
wing
eye socket
(skull) bony part of the nose
cartilage
septum
nose viewed from below

DOBKIN


eye ball
lids overlapping the eyeball
profile view of eye ball
muscles
here lids meet in a U-curve
upper lid overlaps the lower
nose
deep set eye
bulging eye
this
not this

DOBKIN



THE MOUTH

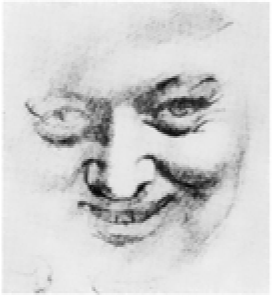
Since the lips rest upon a cylindrical base—the set of teeth—the mouth bears a feeling of a curve, not a straight line. The mouth loses its contour only when there are no teeth to give it shape—in some old people, for example. Understanding the cylindrical form also may help the student draw the mouth from any point of view by placing the cylinder in any desired position (*Fig. 46*).

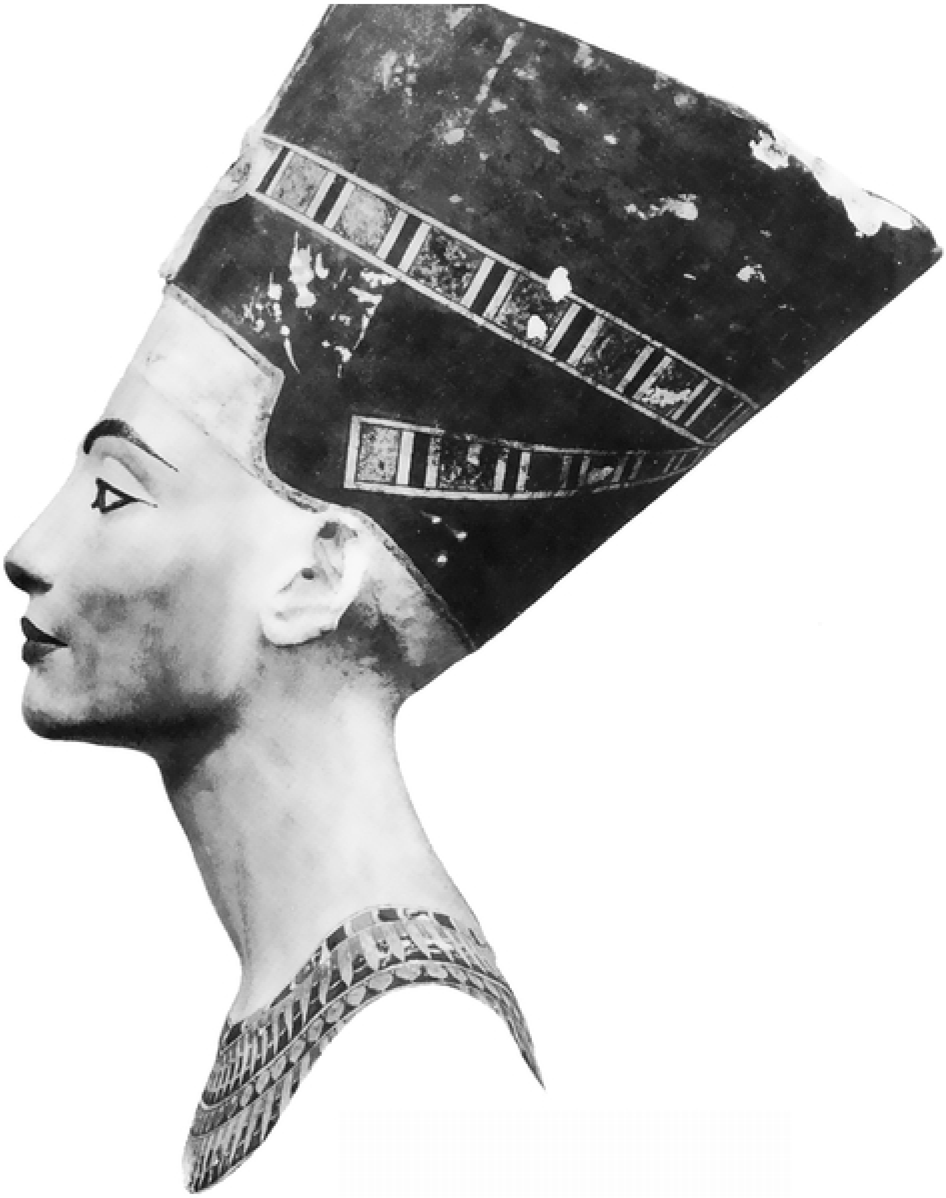
A series of delicate muscles around the mouth gives the lips their extreme mobility, varying from a broad laugh to the hardly perceptible smile of Leonardo’s *Mona Lisa*. The artist should observe that even the slightest movement of the lips changes the aspect of the face.

In infants, whose lips are used for sucking only, the upper lip protrudes very obviously over the lower. As the human being matures, the under jaw develops, and the two lips become approximately even.

In drawing an open mouth, one must always be aware of the fact that it is the jaw, the lower part of the face, that moves as if on a hinge (see page 75). The upper part has no independent power of movement even when the mouth is quite open. To allow for greater mobility of the lower jaw, the head usually tilts back a little when the mouth opens to a shouting position.

RUBENS





Egyptian sculpture. Portrait of Queen Nefretete

THE NECK

The neck is cylindrical in form and curves slightly forward even when the head is thrown back. Mainly, it consists of a pair of muscles in the front called *sterno mastoids*, and of the two sides of the *trapezius* in the back. (See page 72.)

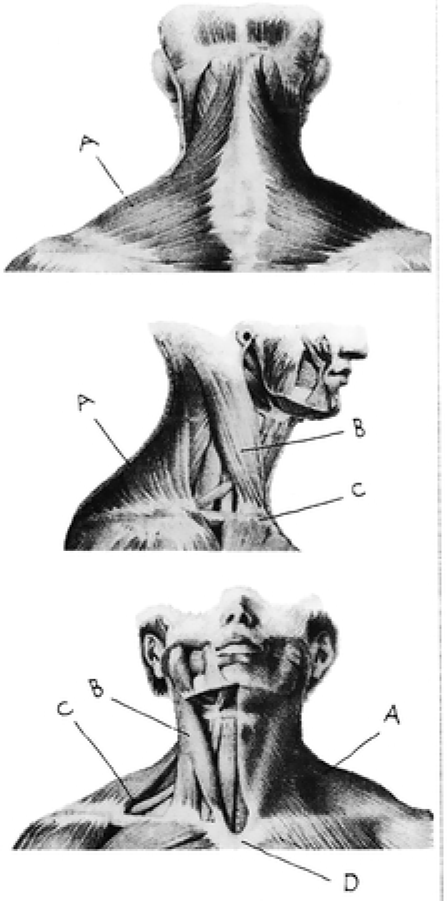
Note that the chin is lower than the nape, and that the base of the neck is lower in front than in back. That is why *trapezius*, the back muscle, is plainly visible from the front. The adam's apple is much more prominent in men than it is in women.

Do not draw the neck as so many students do (see page 72) :

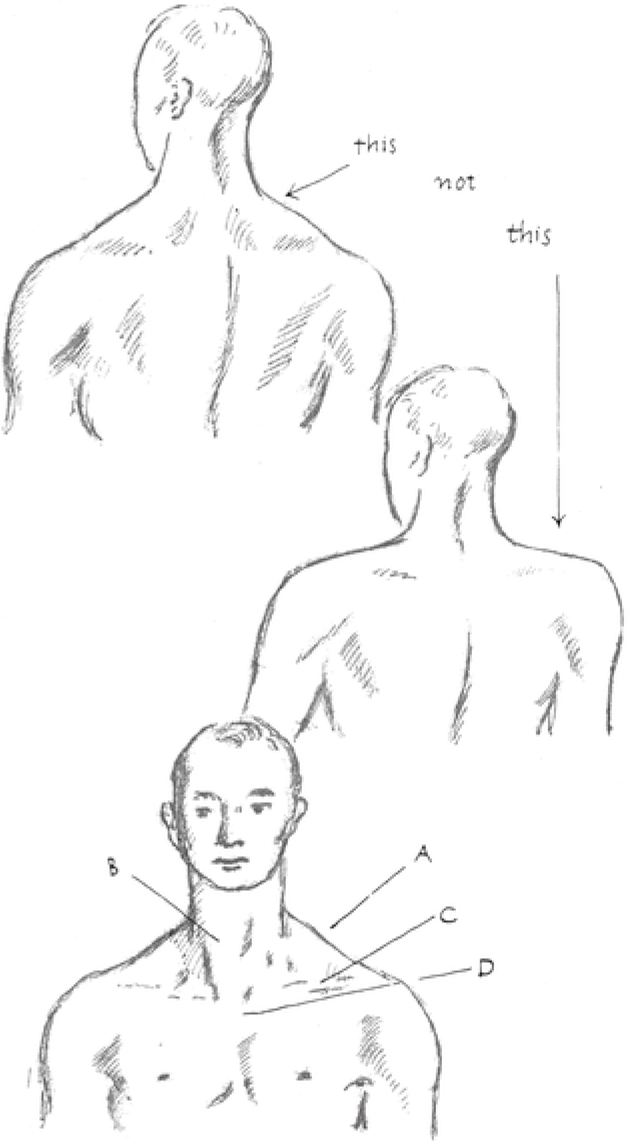
1. Absolutely vertical in the profile view.

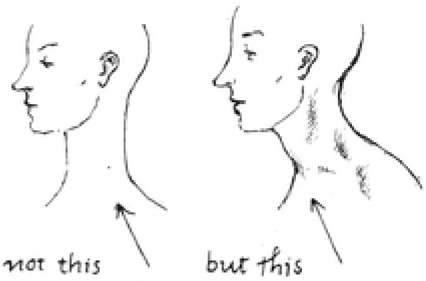
2. With its base as low in the back as it is in the front.

3. With the neck much narrower than the head. (The neck is attached on both sides by *sterno mastoids* which originate in back of the ears, making the neck about as wide as the face when viewed from the front.)



A. Trapezius
B. Sterno-mastoid
C. Clavicle
D. Sternum


this
not
this
B
A
C
D


not this
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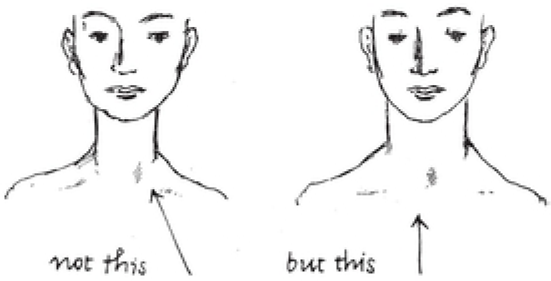
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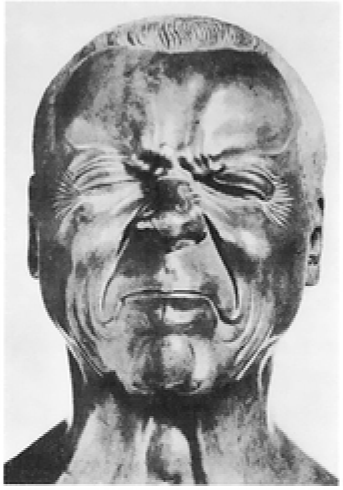
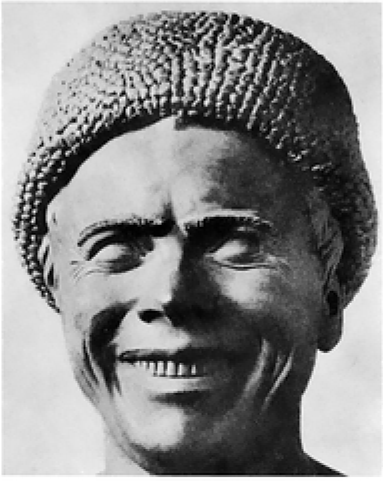
THE FACE



Our interest in the face begins at a very early age when, as infants, we learn to read the expression on our mother’s face. Thereafter our ability to understand and judge its expression grows rapidly. In children’s drawings, for example, the face is always very important. The rest of the body doesn’t seem to matter much. A stick-like frame with a large moon-like face is the way most children represent a man. Even primitive artists will, like children, draw or sculp a small body with a large head. The head will be conspicuous, not only because it is disproportionately large, but also because, compared to the body, it will be drawn or carved with greater care and understanding.

Historically speaking, even after the ability to draw a face was fully developed, it took many more years before the mask came fully to life, before the artist was able to infuse the face with human emotions. But time alone does not produce men who can draw a face that lives and has character. Men capable of this kind of performance are not only artists but are extremely sensitive and understanding, with a deep concern and feeling for their fellow men.

Learning to draw various expressions can be done best by making grimaces in a mirror, approximating certain emotions such as laughter and sorrow, and at the same time analyzing and copying what you see. Many artists interested in facial expression have been doing just that. Any change in the expression can be readily noted in the mouth, eyes, eyebrows, and forehead. When one laughs the curves of the mouth lift, the mouth opens a little, the eyes usually slant upwards a trifle, and the cheeks swell. A very simplified version of this can be found in the mask traditionally called Comedy. In a tragic mask, the corners of the mouth and the eyes droop a little, the cheeks thin out, and the eyebrows follow the contour of the eyes. The face becomes longer, hence the popular expression, “Why such a long face ?”



MESSERSCHMIDT

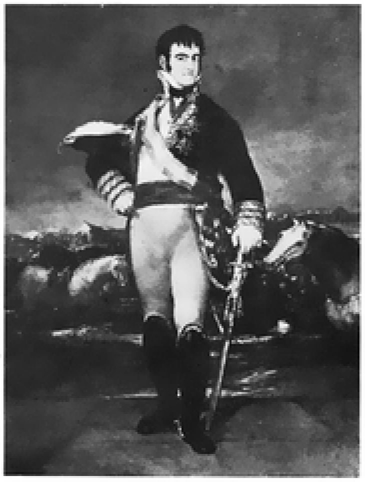
PERSONALITY

A head, however expressively done, should be part of a convincing figure. The face is not the sole means of depicting a credible per–sonality. The character of men and women can be revealed through their gestures, clothes, and attitudes for, curiously enough, every community develops a generalization about the looks and appearance of its doctors, butchers, lawyers, judges, courtesans, and kings. And it is these general observations about people that can be of real value to an artist, for by accepting popular generalizations, he can make the rank and profession of his characters immediately comprehensible to his people.

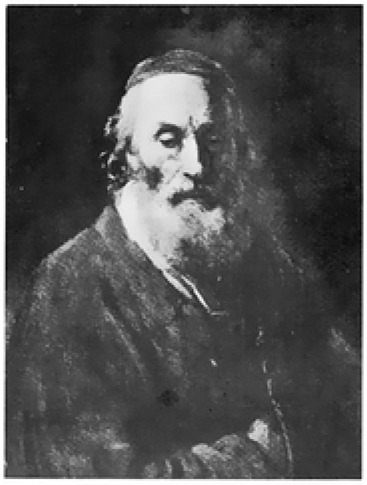
For example, the universal concept of a martyr is a lean, ill-fed, and tortured man. Christ on the cross is never represented as a fat and well-fed individual, even though fat men too have suffered martyrdom. Likewise, although many rich people are lean, the universal concept of wealth is physical wellbeing and therefore a lean and hungry-looking man can never become a convincing symbol of affluence. To borrow a word from the movie directors, it is the artist's sense for "cast–ing" that often makes his characters come to life. It is this uncanny ability to classify people that makes Goya's princes, Rembrandt's Jews of the ghetto, and Daumier's lawyers, judges, and workers live.

At this point it may be well to add that great artists have always used these popular generalizations with integrity and a deep sense of social responsibility. It is obvious that in the hands of a prejudiced person any generaliza–tion may be used as a weapon to slander a race or a religious group. Fortunately, art of this kind never becomes permanent. It usually dies with the social sickness that perpetrates it.

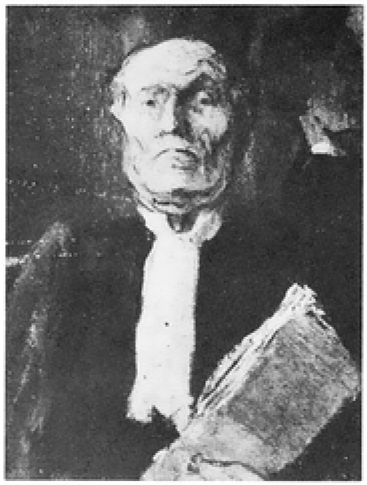
As with all theories in art, that of the artist's use of popular generalizations has its exceptions. In many cases, artists may go contrary to popular notions. Goya can be cited as a notable example. In his portraits of the king and queen and their dandies, their position in the court is unmistakable despite their lack of traditional dignity and regality. But what they are as human beings is clearly written all over their faces. One thing is certain: They were painted by a man who knew them well and who, because of his love of truth, refused to subscribe to any mythical conception of how royalty should look.



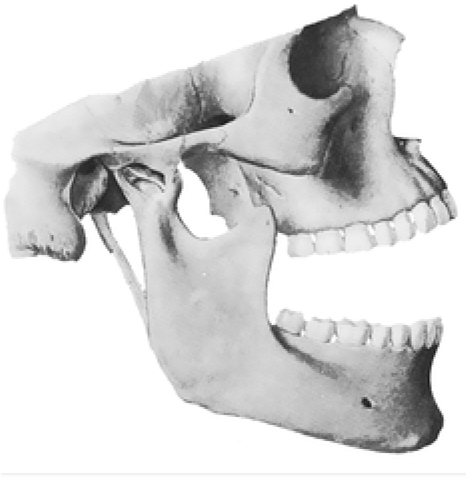
GOYA

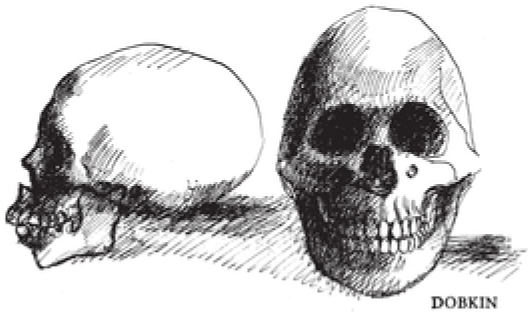


REMBRANDT



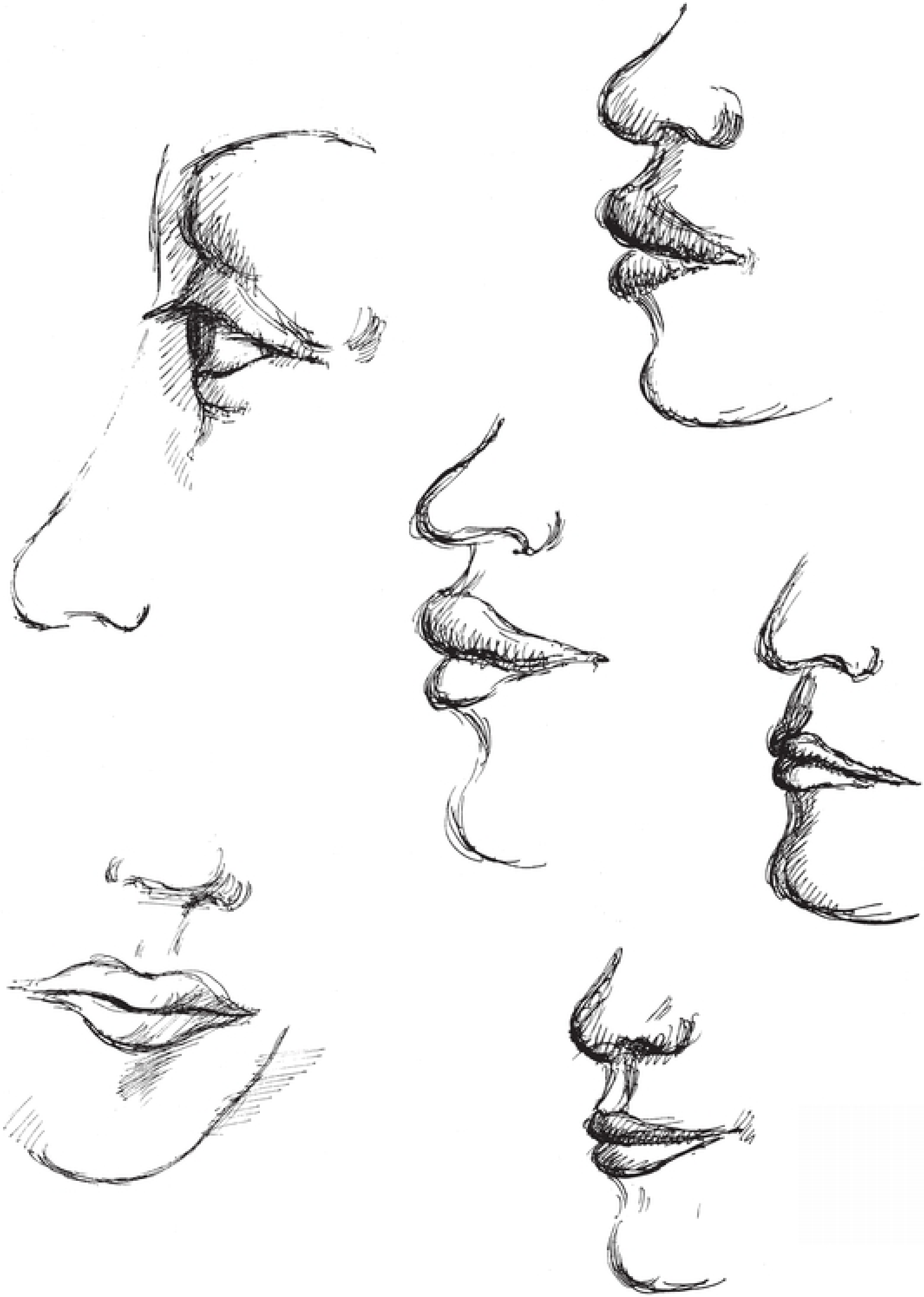
DAUMIER



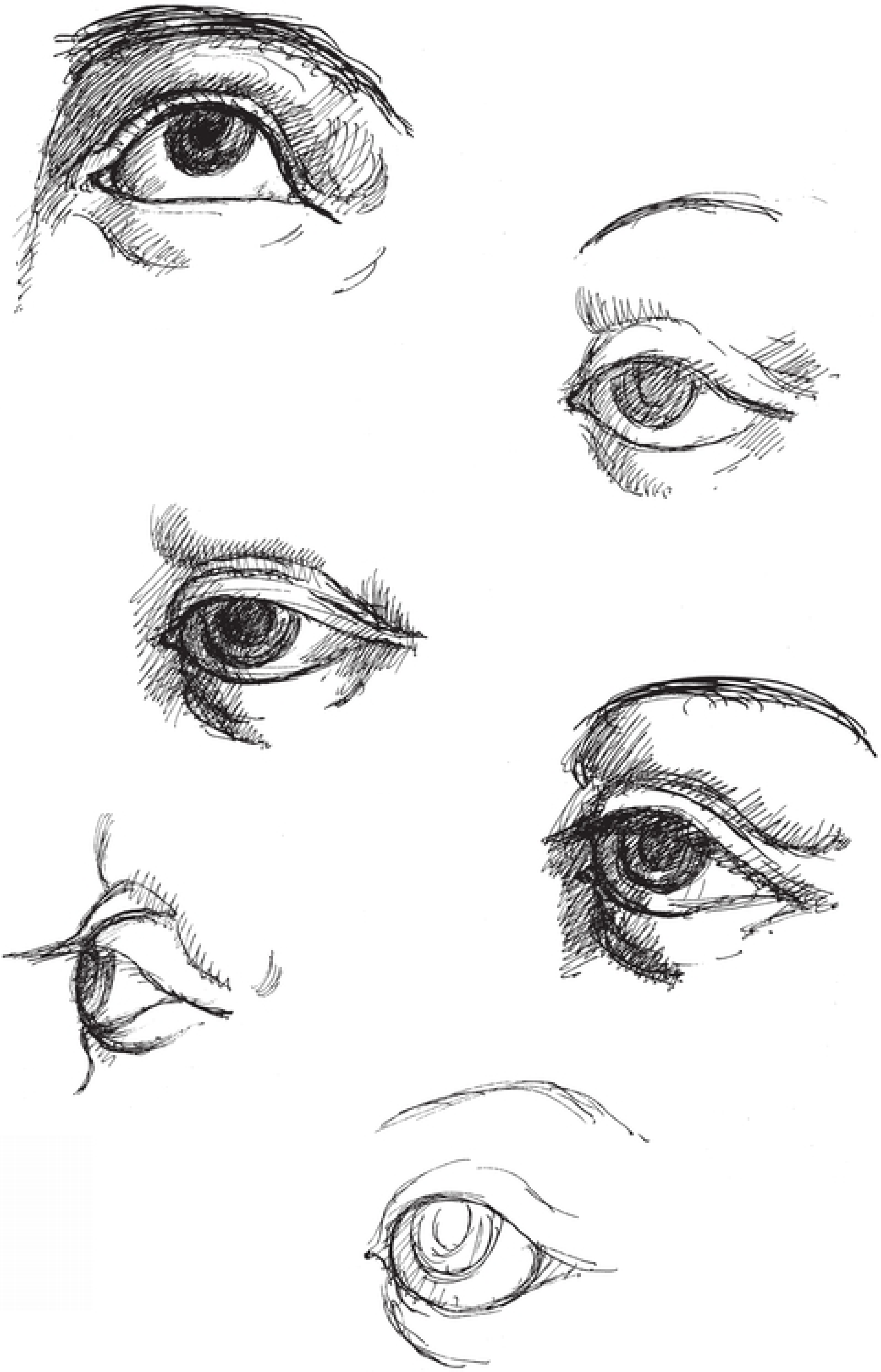


DOBKIN

It is the jaw, the lower part of the skull, that moves as on a hinge. The upper part has no independent power of movement.



DOBKIN



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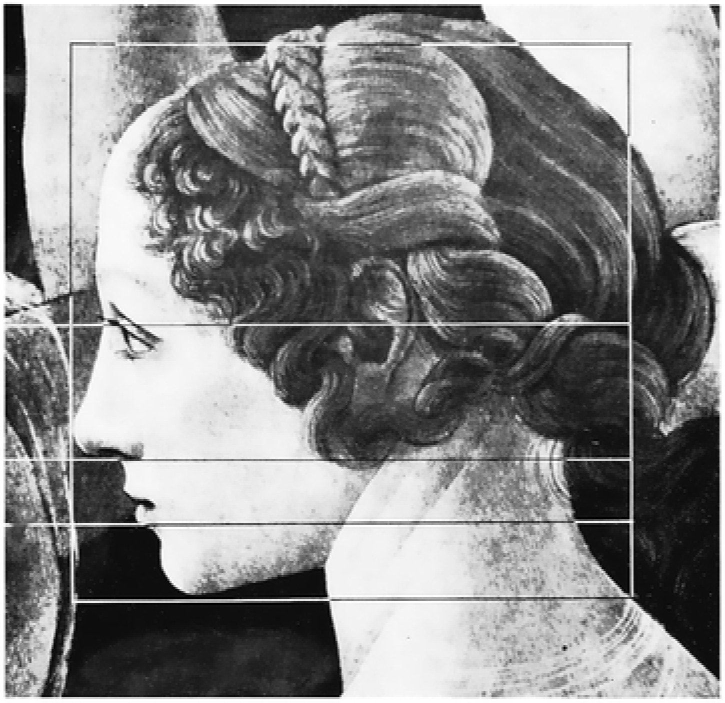
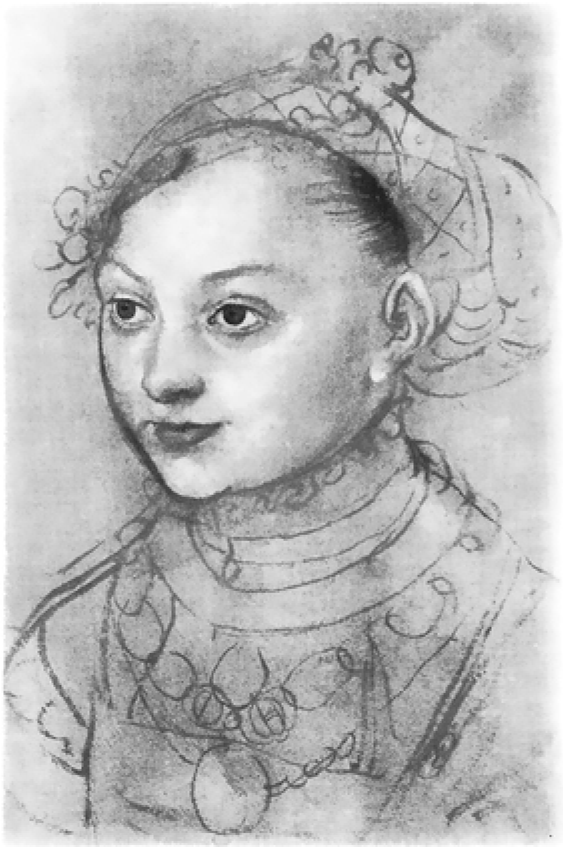
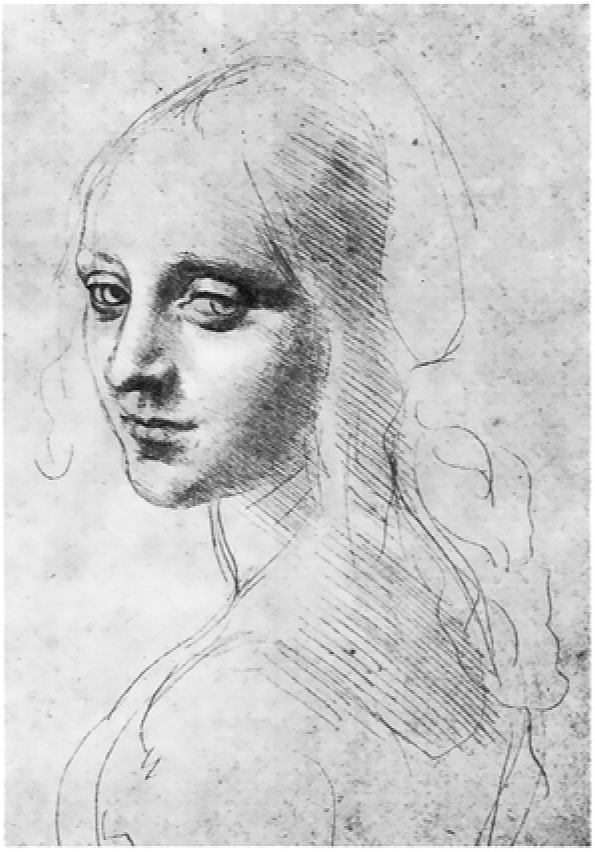


BOTTICELLI. The lines superimposed upon this detail of a painting by Botticelli indicate the position of the features in relation to the head, as explained on p. 64.

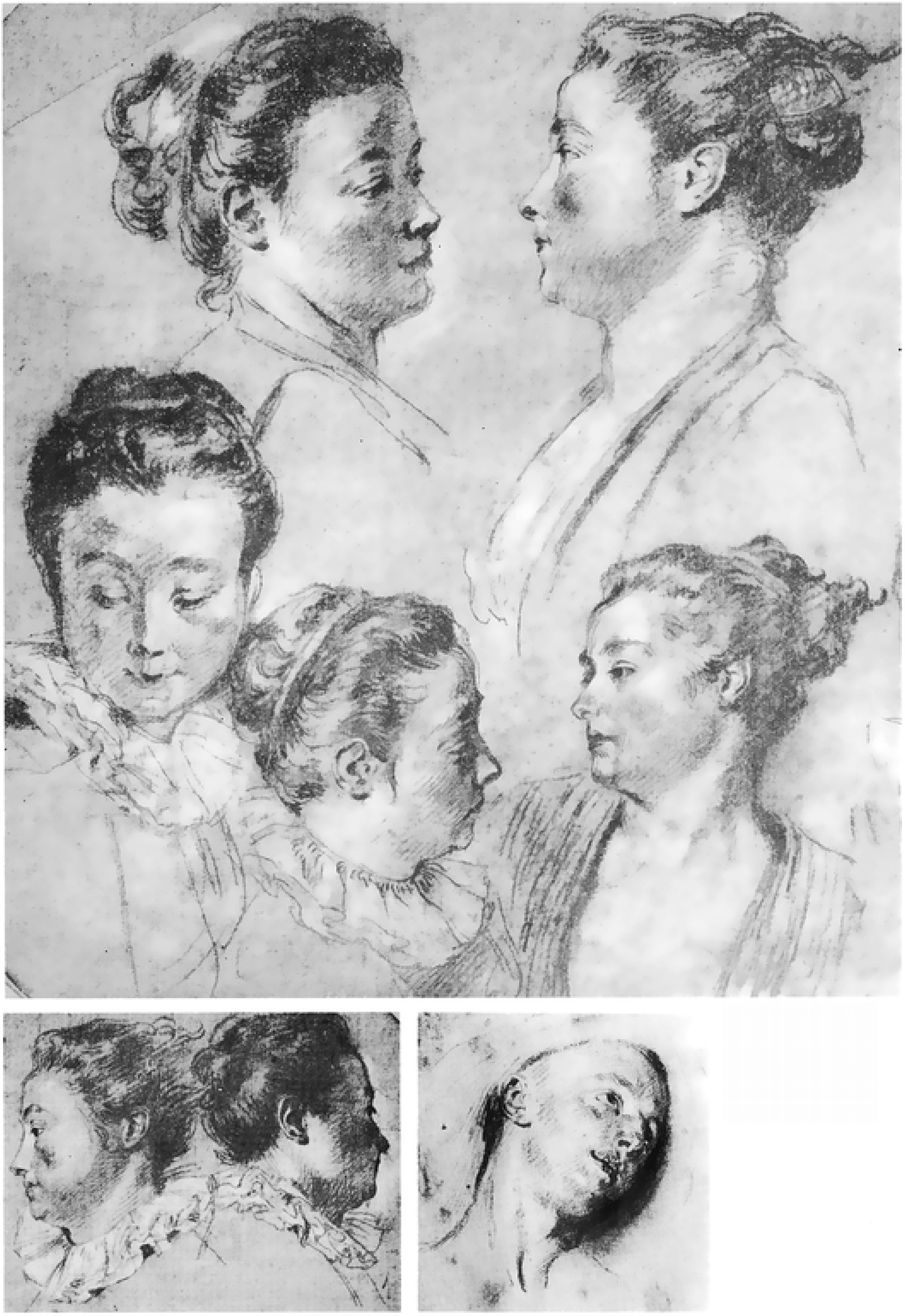
Cranach and Leonardo had an amazing feeling for the head as a shape and for the skull which determines the shape of the features, eyes, nose, and mouth. In both cases the heads are viewed abstractly and are certainly built with the egg, rather than the block, as a basis.



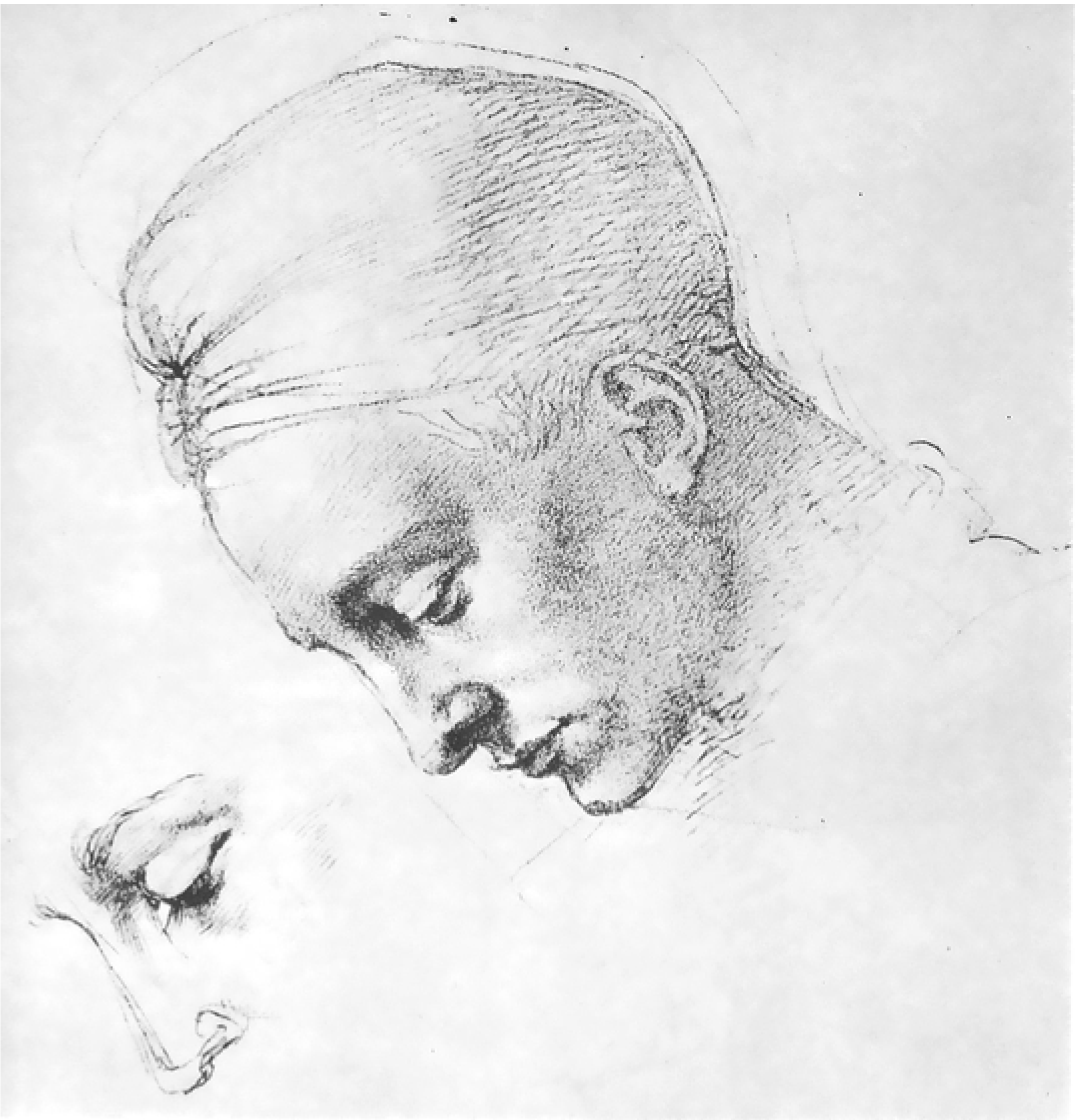
CRANACH



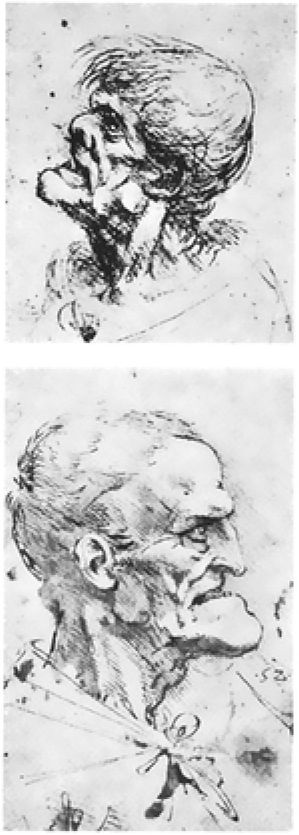
LEONARDO



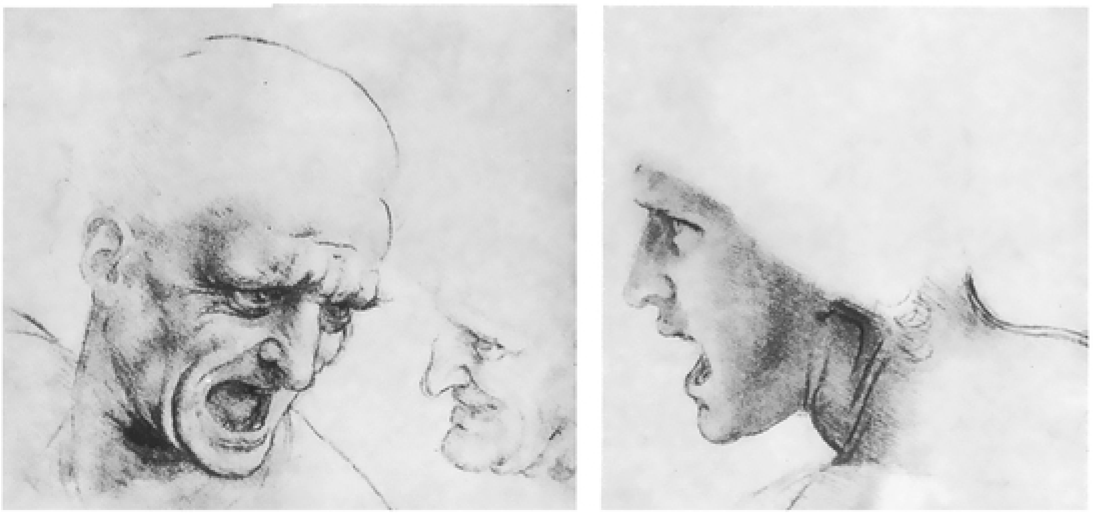
WATTEAU



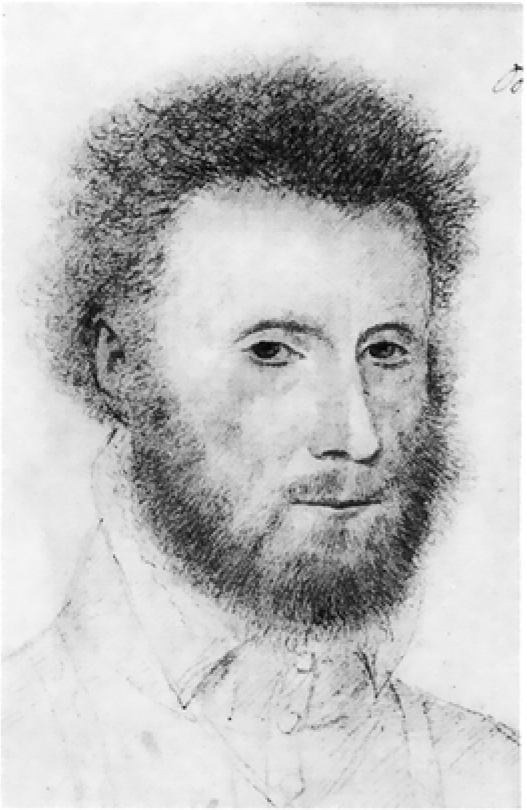
MICHELANGELO



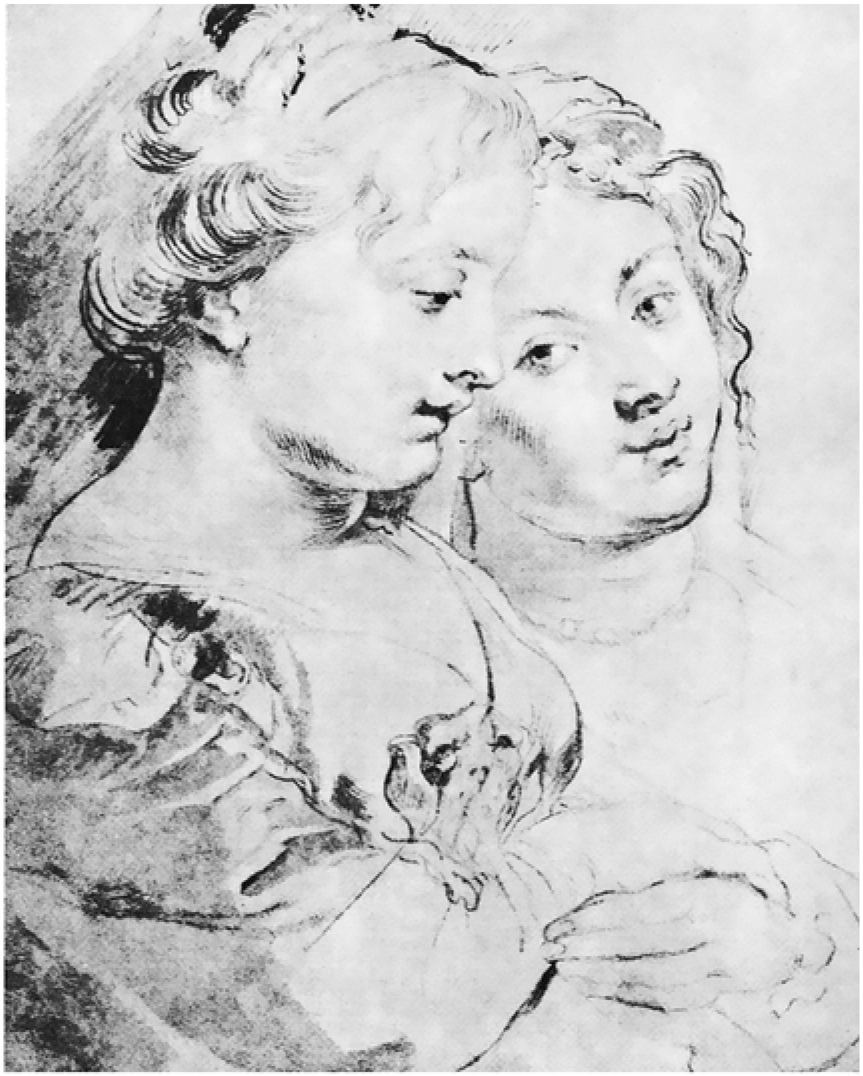
LEONARDO



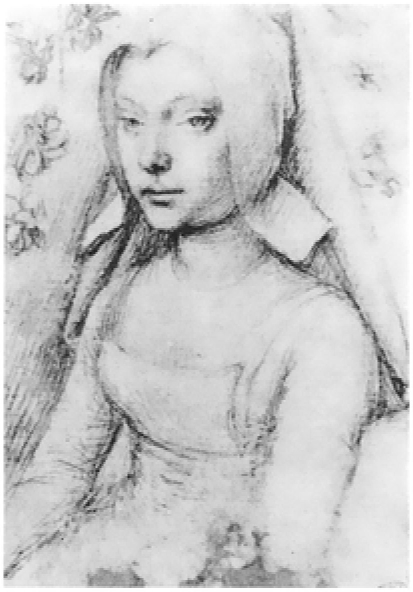
LEONARDO



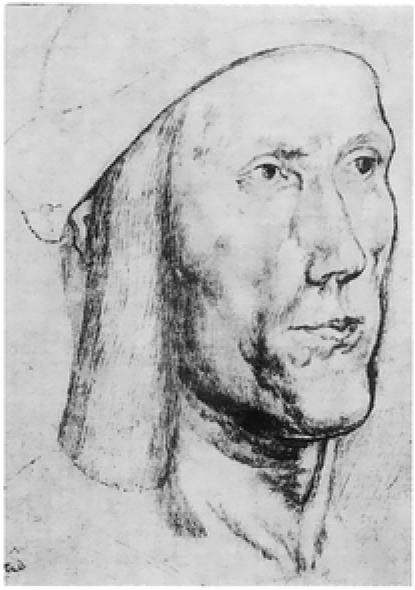
CLOUET



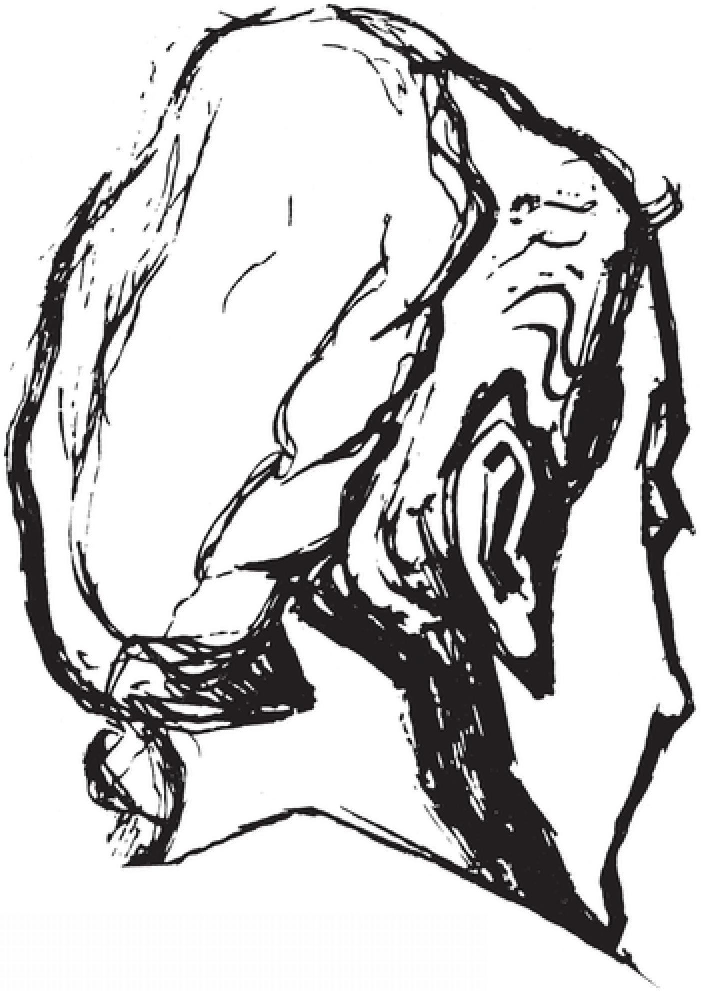
RUBENS



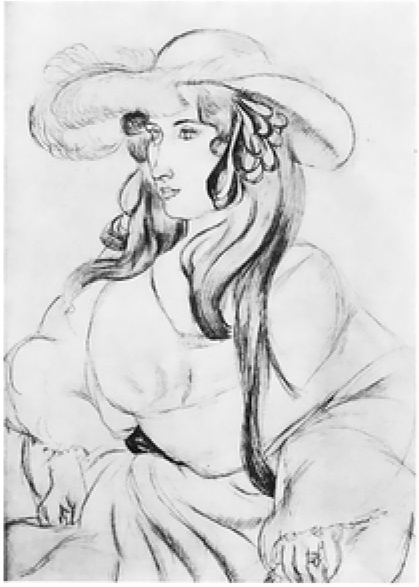
G. DAVID



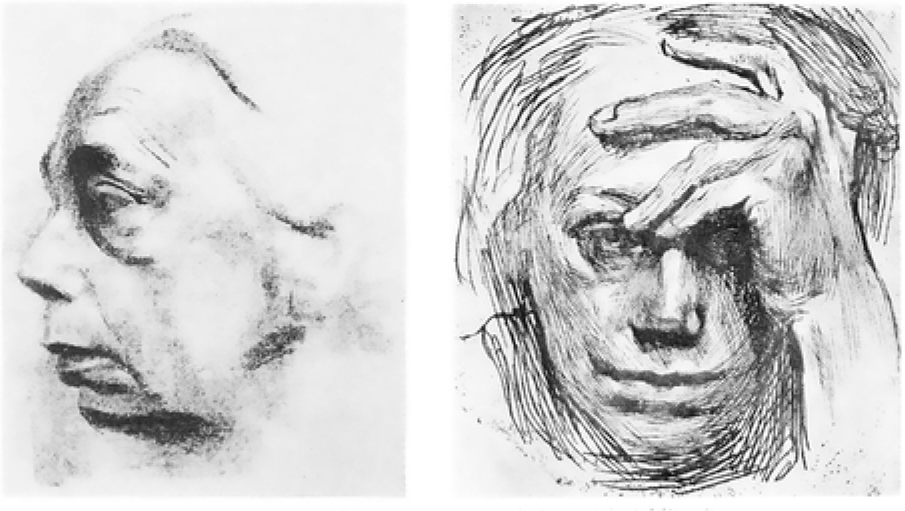
Northern School, artist unknown



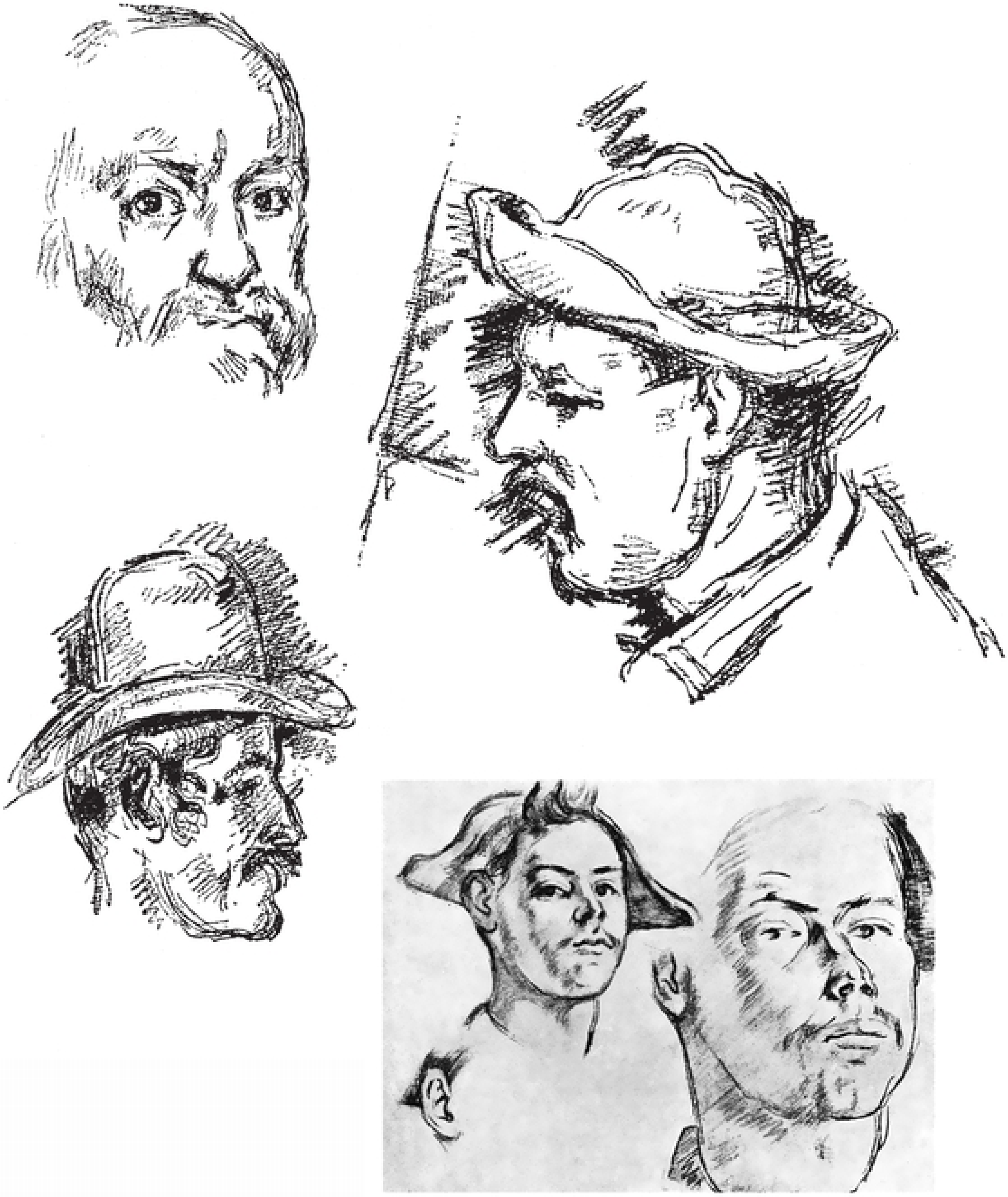
EL GRECO. One of the very few existing drawings by El Greco. Its unusually direct and forceful treatment makes it outstanding in the realm of master drawings.



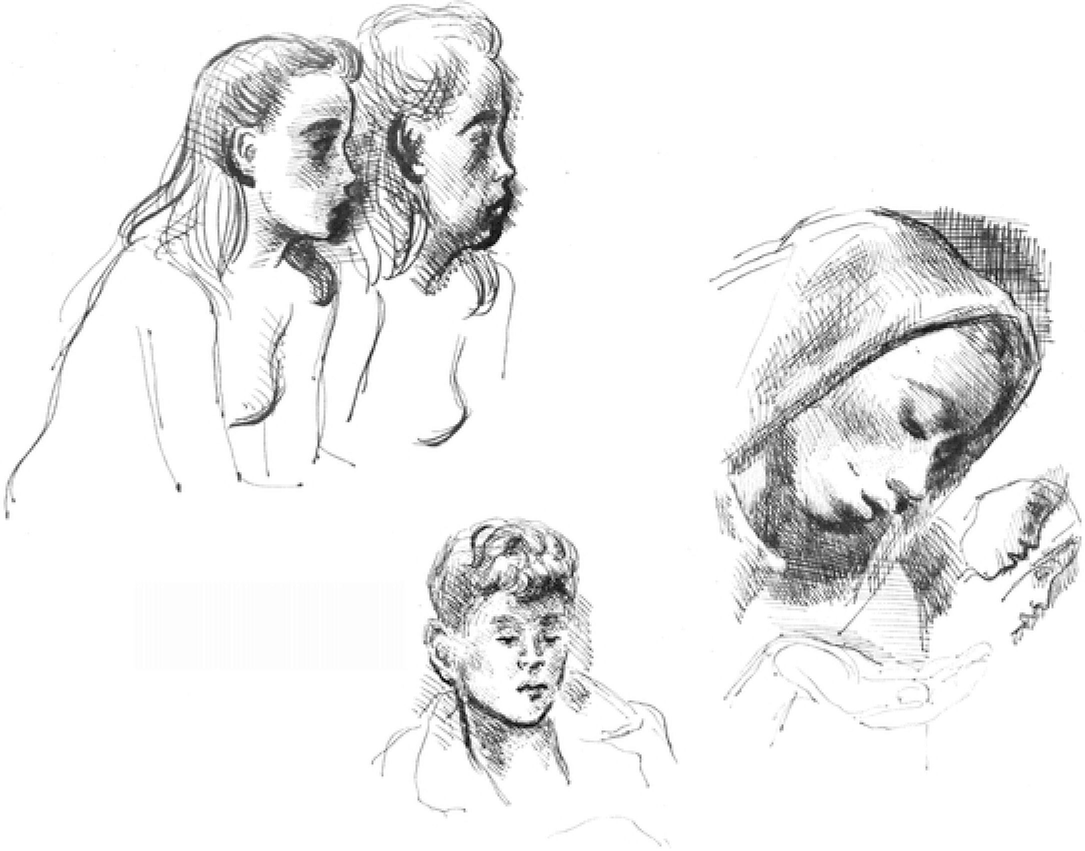
MATISSE



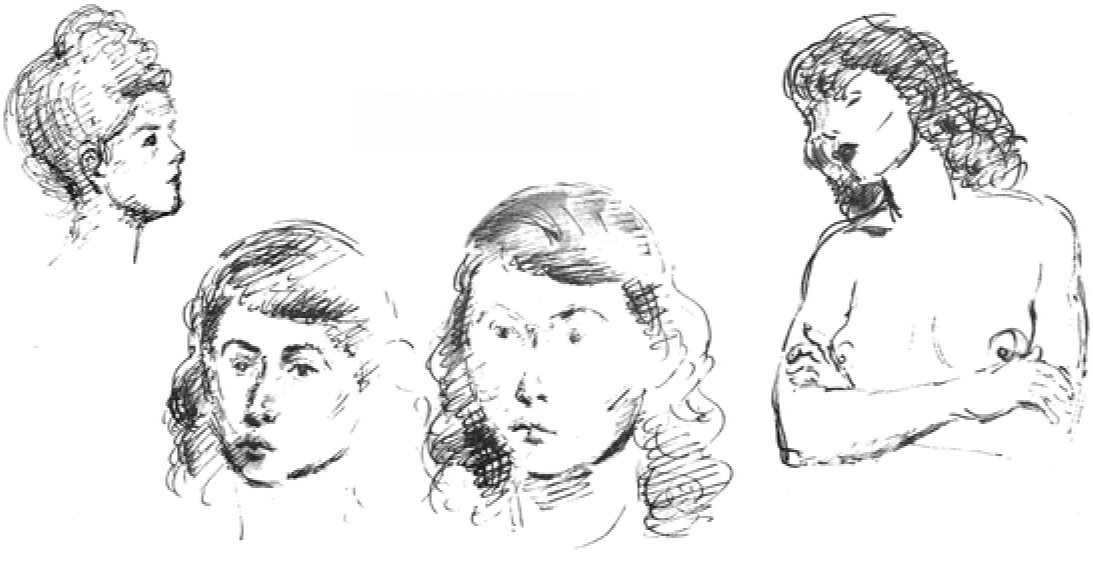
KOLLWITZ



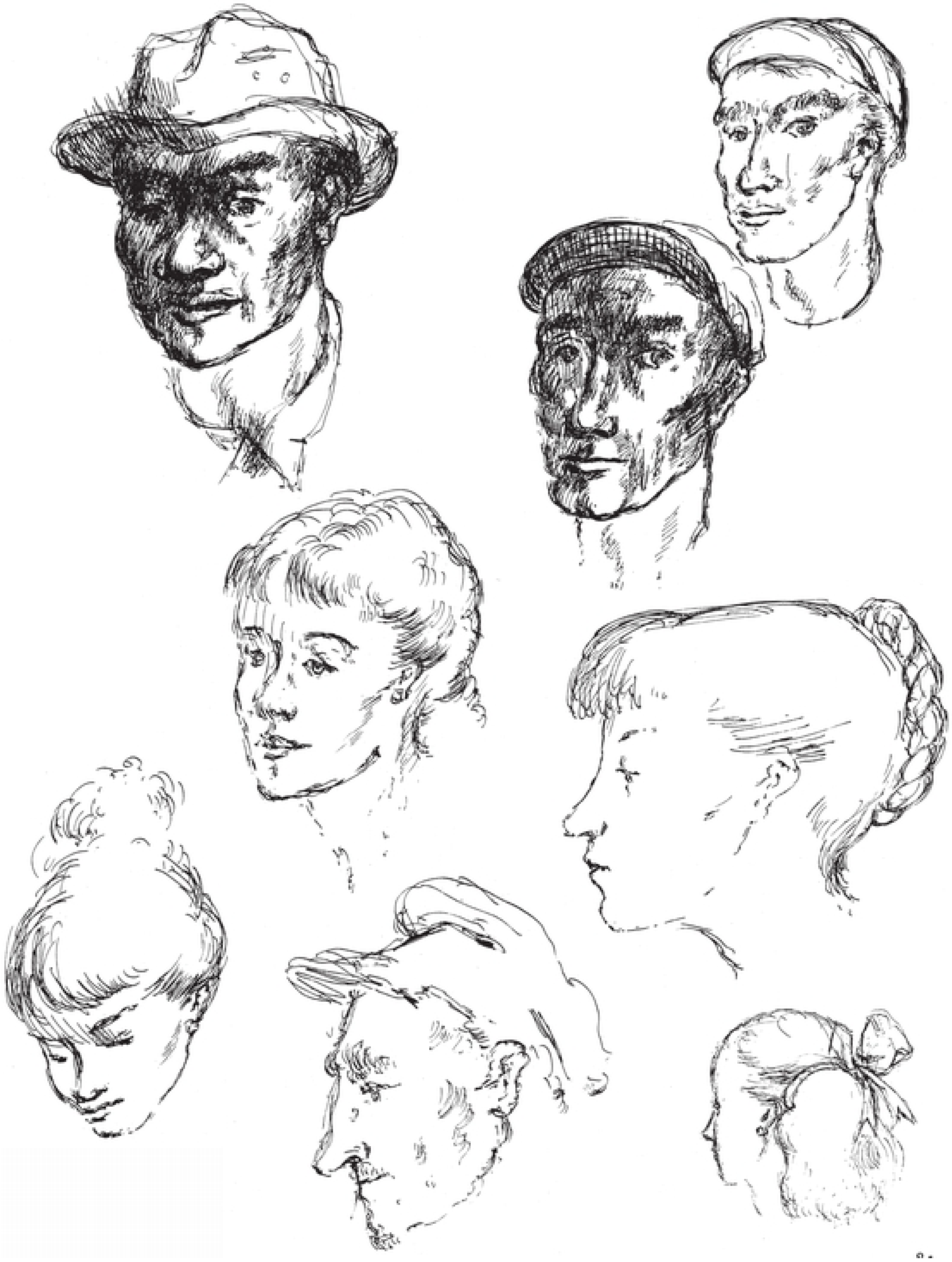
CÉZANNE. Those who speak of Cezanne’s formal or abstract qualities will do well to examine his portrait heads more closely. Few artists were able to capture personality and character as well as he.



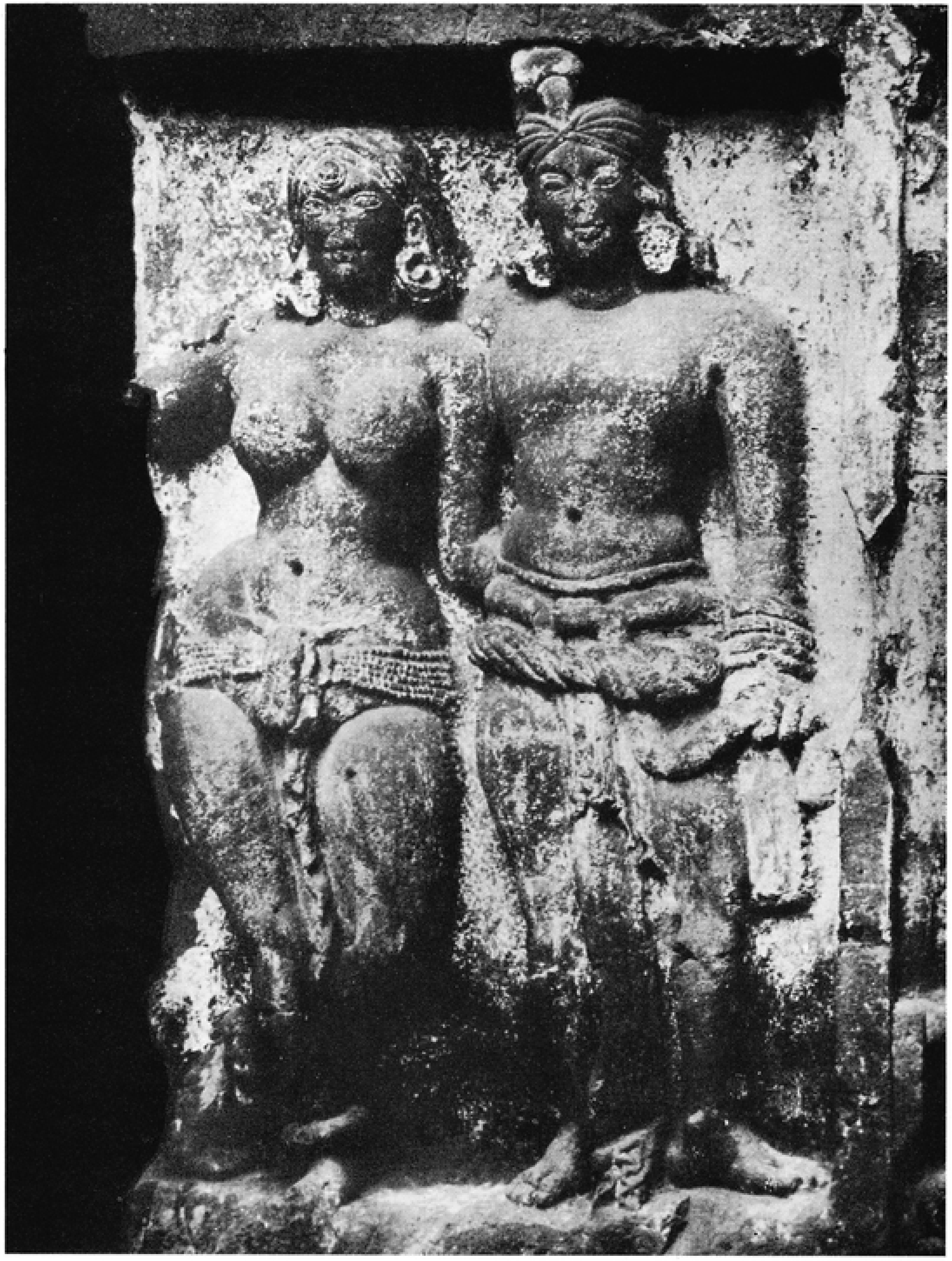
MOSES SOYER



RAPHAEL SOYER

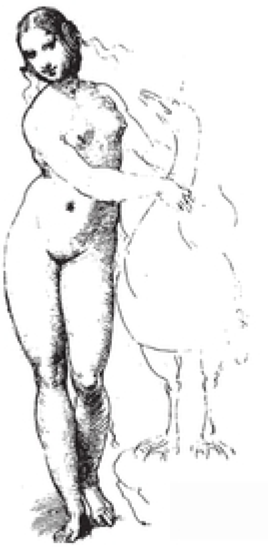


DOBKIN



Indian sculpture, carved in rock, First Century B.C. Royal Couple, Screen of Great Caitya-Hall at Karli.

Differences BETWEEN MALE AND FEMALE



RAPHAEL

ANYONE who has ever seen a Japanese print knows that the Japanese artist approaches the problem of drawing a human figure quite dif–ferently from the Western draughtsman, that his idea of physical beauty is based on a dif–ferent concept. Consequently, many of our problems in drawing may be of no particular interest to him. Yet there is one problem that all artists in all lands and of all periods have in common—and that is in making a man look like a man and a woman like a woman.

Despite periodic shifts in popular taste, the structural differences between the male and the female are seldom violated. If anything, they are accentuated. A vogue that makes a female appear like a male instead of enhanc–ing her natural contours is usually so short–lived that it hardly ever affects the concept of woman in fine art. Very few pictures will ever recall the breastless and hipless woman of the early 1920’s, for most painters were loath to accept such abnormalities in the female form. They viewed this masculine woman as a dress designer’s folly, as a vogue of very limited popularity in a small section of Europe and the United States. Significantly, this contour appeared during World War I when women often had to accept the work and responsibilities of the male. To the rest of the world, woman never lost her natural attractiveness, her sex characteristics. And, to an artist, it is the differences in the physical appearances of a man and a woman that are important. The major differences are:

1. *The torso or trunk.* a. The torso of the female is smaller and fleshier than that of the male. It is considerably narrower than the male across the shoulders, but wider and fleshier across the hips. The female torso can be viewed as a triangle with the apex pointing upward, while in the male the apex of the triangle points downward. (See p. 89.)

b. The female torso is longer in proportion to the legs than that of the male. Hence the middle of her body is a little above the pubis.

2. *The pelvis*. In no part of the skeleton is the difference between the male and female as obvious as in the pelvis. A woman’s pelvis, although not so high as that of a male, is wider and is set at a greater angle so that it juts out much more in the back, creating a little ledge when seen in profile (*Fig. 47*).

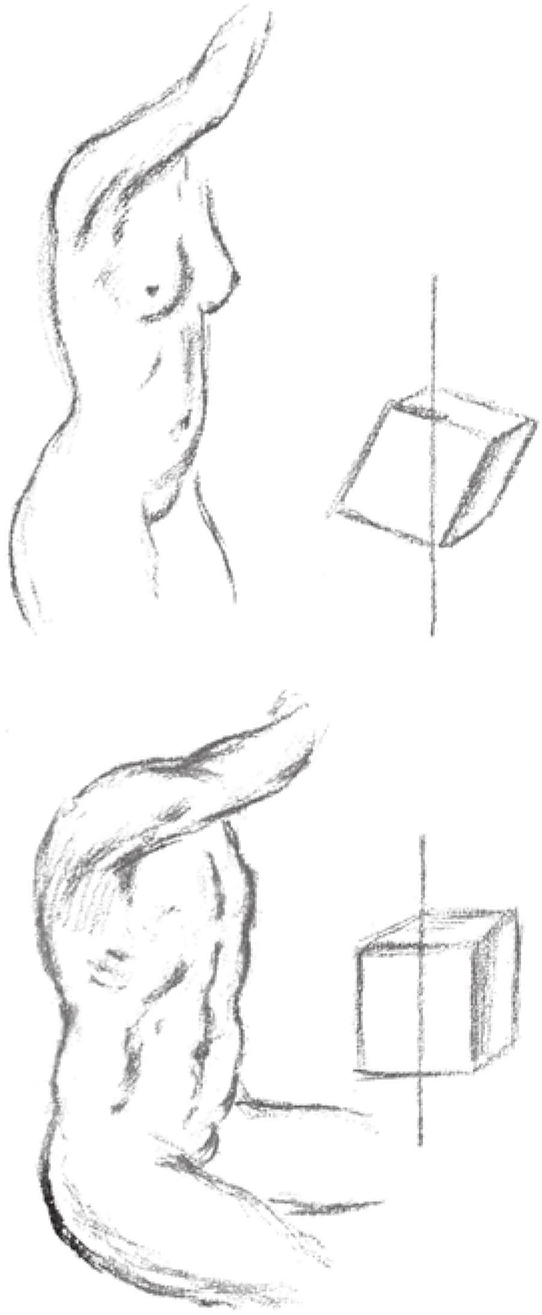


Fig. 47

The pelvis of a female, viewed in relation to the spinal column is set at a greater angle than the pelvis of a male. The angle above is exaggerated. It is indicated diagrammatically, as a cube.

3. *The hips*. The widest part of the female torso is across the hips which are fleshier and less muscular than those of the male. The widest part of the male is across the shoulders.

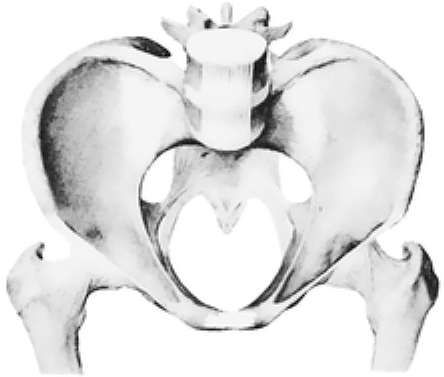
4. *The cage or rib structure*. The female cage is shorter and more rounded than that of the male. Since its lower part is not so wide, the waist in a woman is narrower.

5. *The waist*. Since the female is much smaller at the waist, the cage and pelvis protrude considerably beyond the waistline. A man’s build, on the other hand, is more like a box, the waistline being much more in line with the cage and the pelvis.

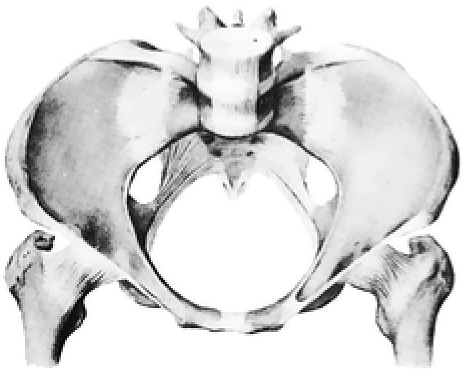
6. *General differences.* A woman’s skull is smaller than that of a man. Her neck seems longer and narrower. Her limbs are shorter, fleshier, and less muscular than those of a man. Altogether she is generally smaller and appears to be less muscular, but fleshier, than the male.

7. *The breasts*. Although breasts exist in both sexes, in a man they are rudimentary and flat, while in a woman they form two hemispherical or conical eminences on the front, extending also on *to the sides of the chest*. In a male, the chest or the *pectoralis major* muscles are often so well developed that they form raised surfaces. These surfaces can be considered similar to the female breasts, but they are never hemispherical or very fleshy. They are flat, more muscular, and cover a larger area.

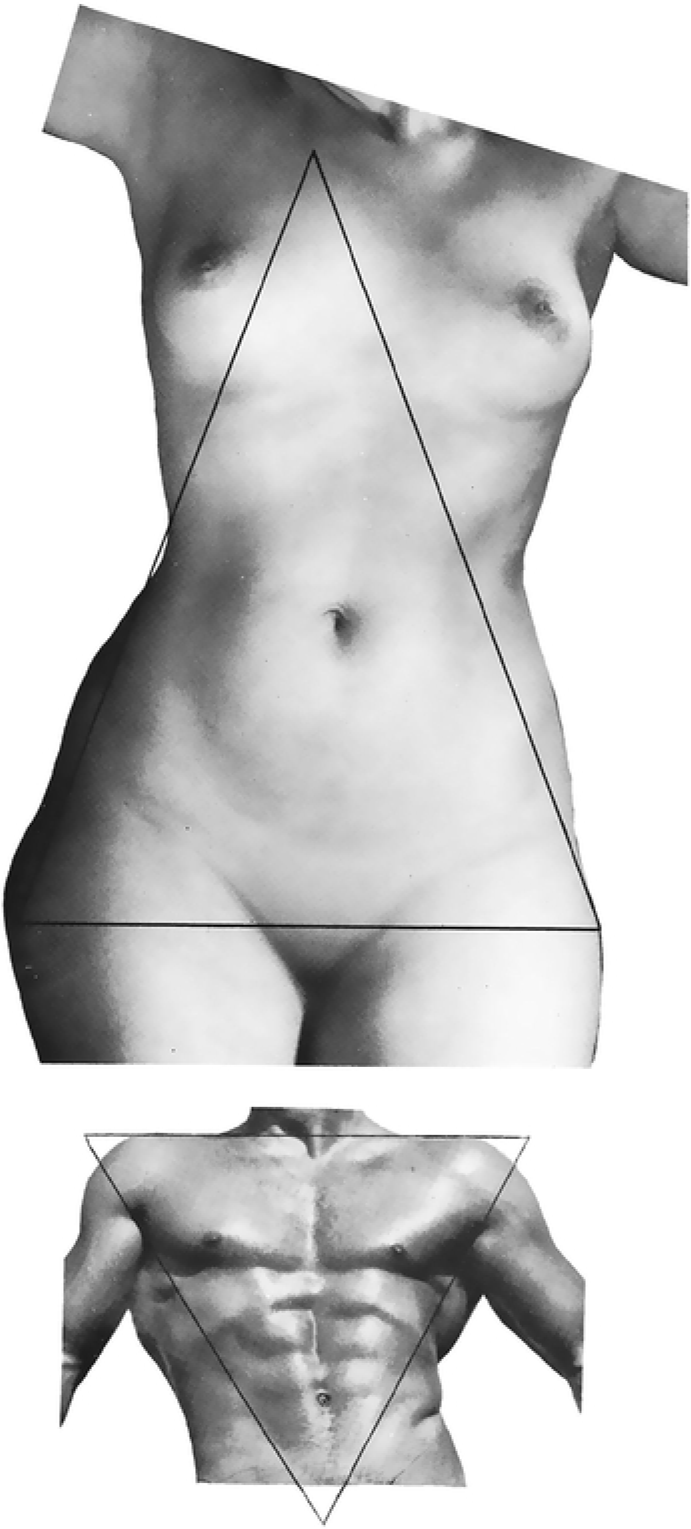
To an artist, the breasts are perhaps the most significant characteristic of the female figure. Even in a dressed form they become ex–tremely essential in shaping a female contour. Because of the very soft and fleshy nature of the breasts, they can be shifted to form well-rounded eminences or pressed tight against the body to form a continuous raised surface. They appear different as the model bends or presses her arms against her sides. In many postures one breast may be lifted by an arm movement while the other may fall naturally downward, creating an unusual but interesting relationship of forms as seen very often in the drawings of Rubens and Michelangelo.



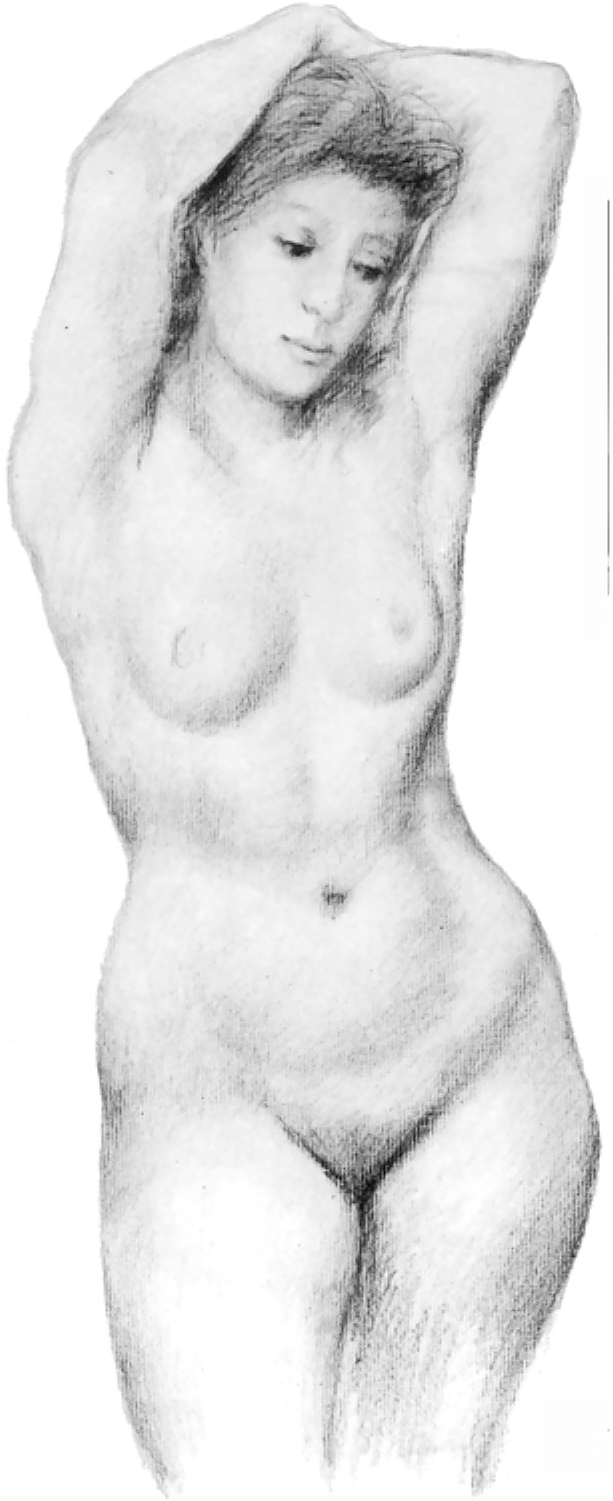
Male pelvis, front view.



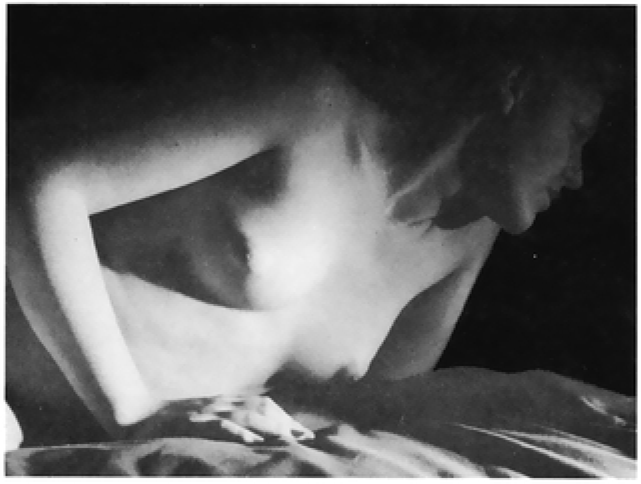
Female pelvis, front view. Note how much wider and how much bigger the central aperture is than in the male pelvis.



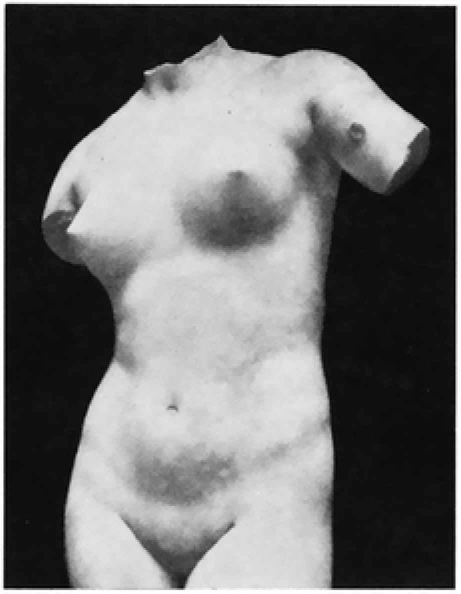
The widest part of the male figure is across the shoulders, and in the female across the hips.



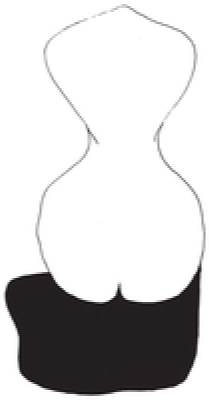
FAUSETT

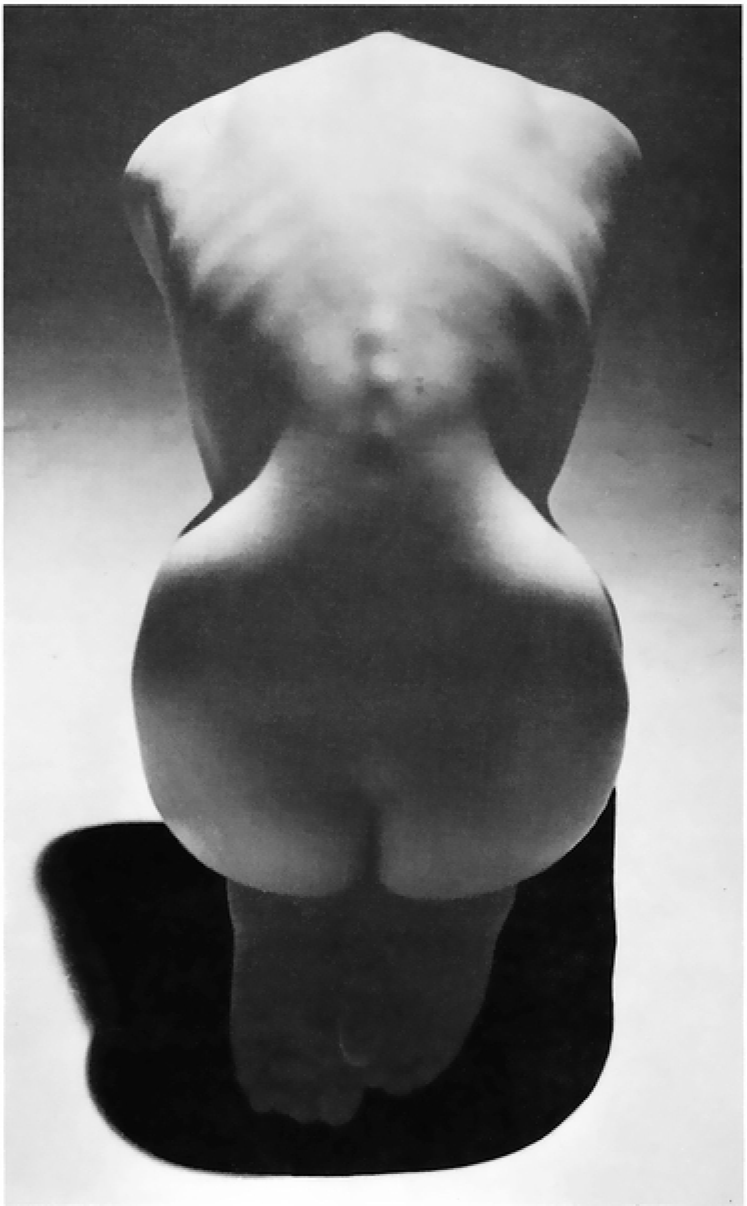


GILBERT



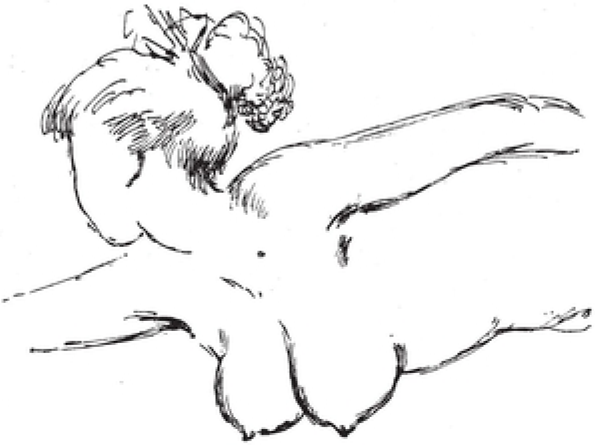
Aphrodite of Cyrene

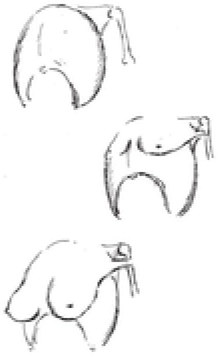


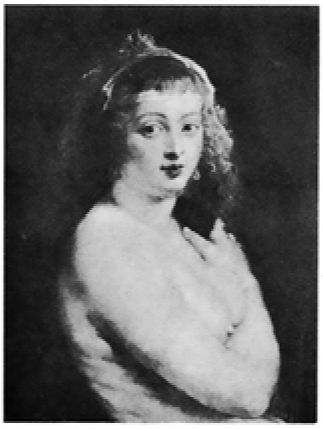


BLUMENFELD. An artist sees in nature what is important to him. The limitation of the medium, the camera, did not prevent the photographer from realizing his subject almost as a piece of sculpture. Although the forms function together, they are easily distinguishable as three separate masses—the cage, the pelvis, and the shadow. Each is different and unusual, yet each contributes to the dramatic vision of the whole figure.

In art, reality needs an interpreter—the artist. Copying a figure is useless. To an artist a figure is a sum total of different shapes. In a sense, the process of learning to draw is the process of developing the ability to *see real things in terms of pure architectural forms. Although here the nude is conceived almost abstractly, it is remarkable how the artist also grasped the full meaning of the female form.*







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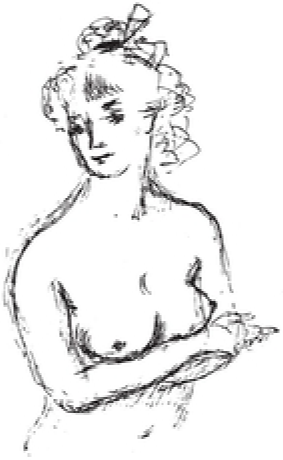

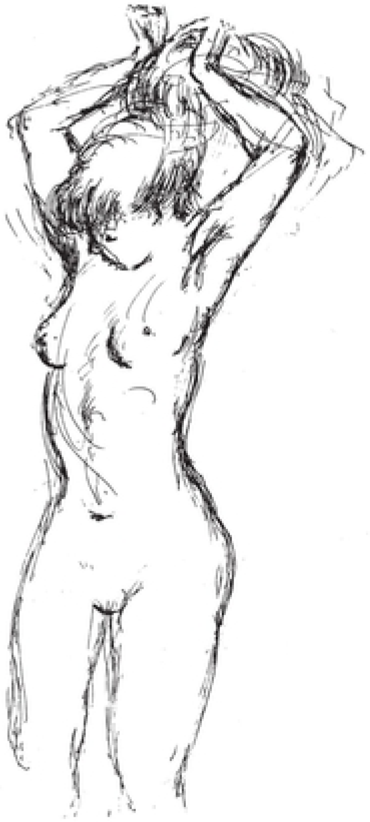

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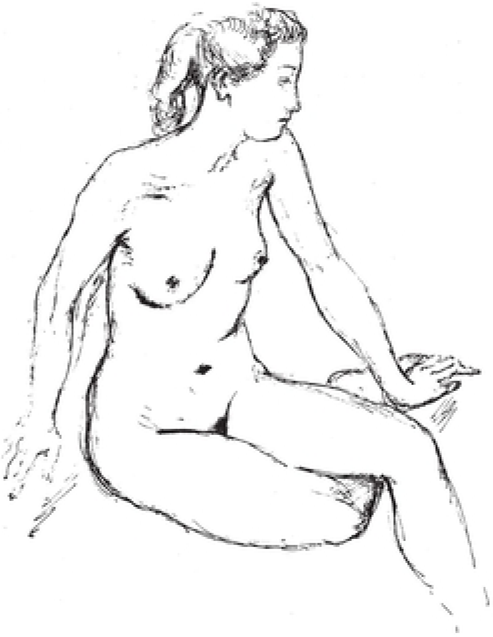
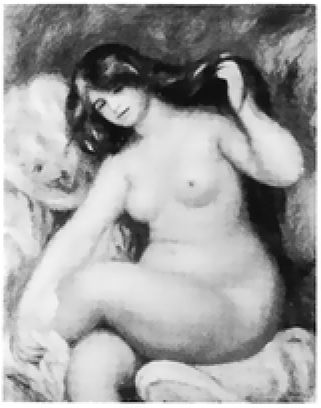
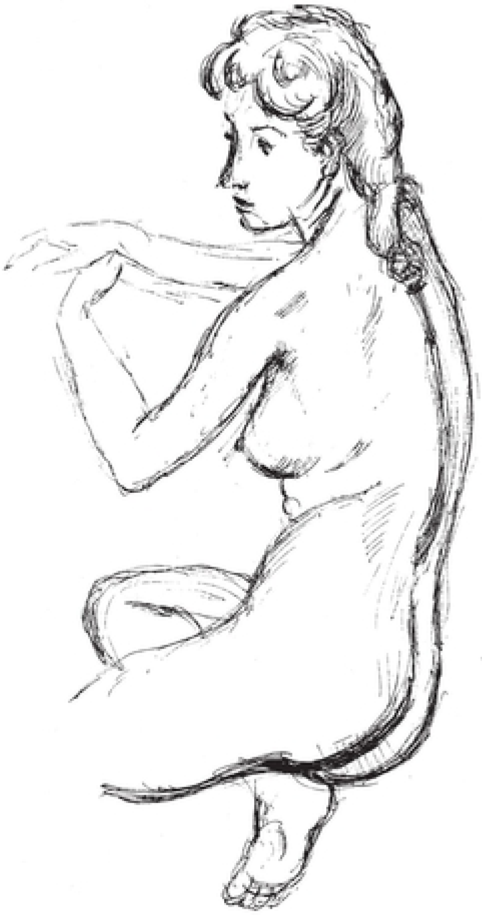




RENOIR



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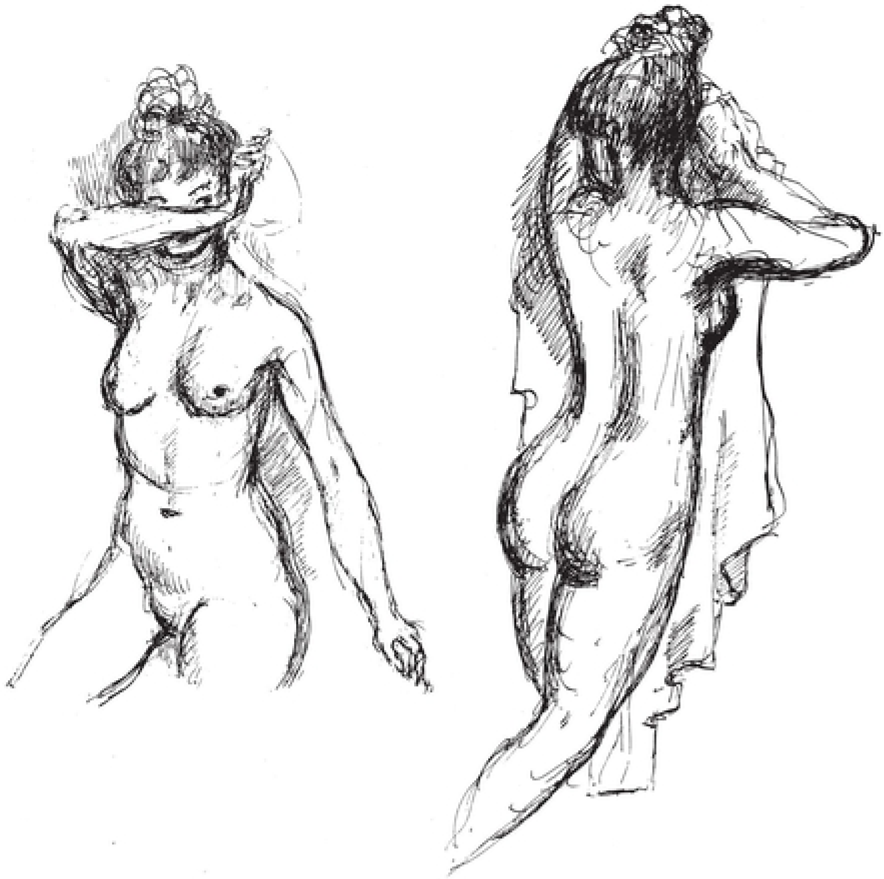

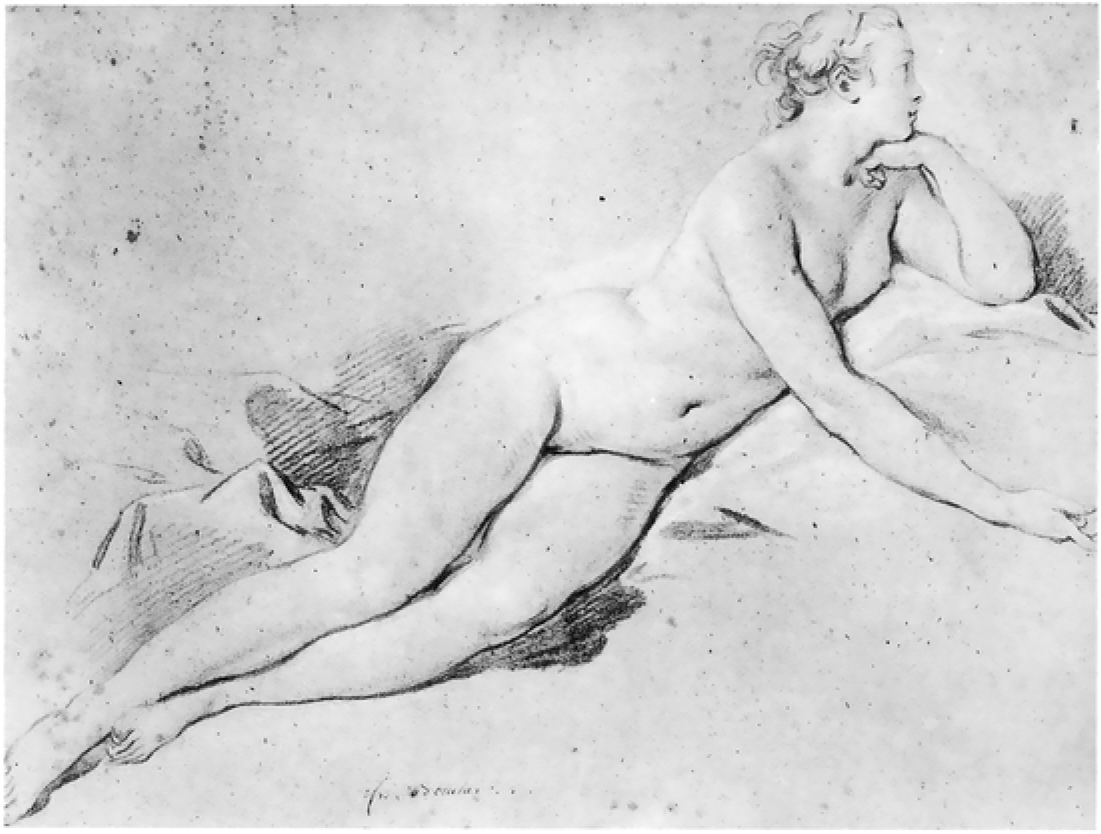

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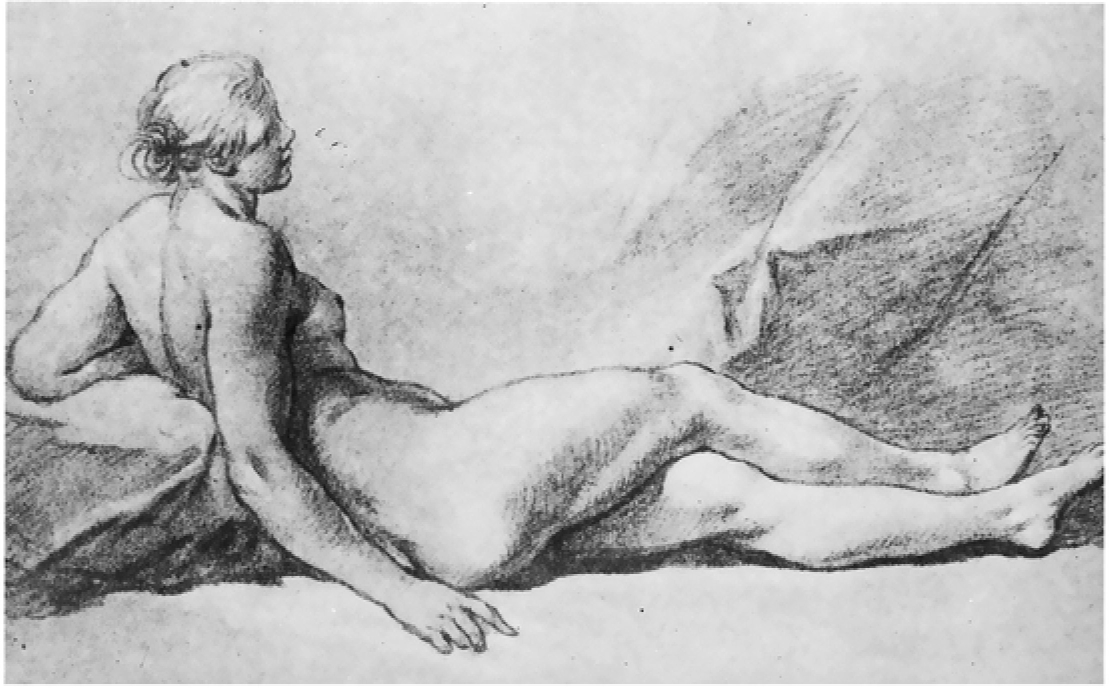
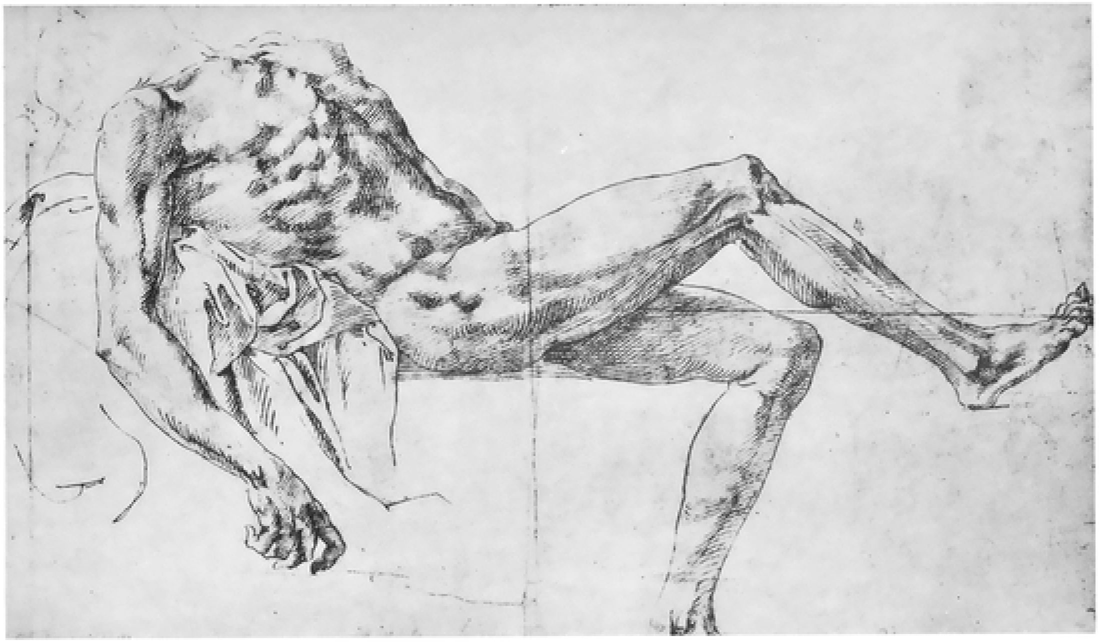
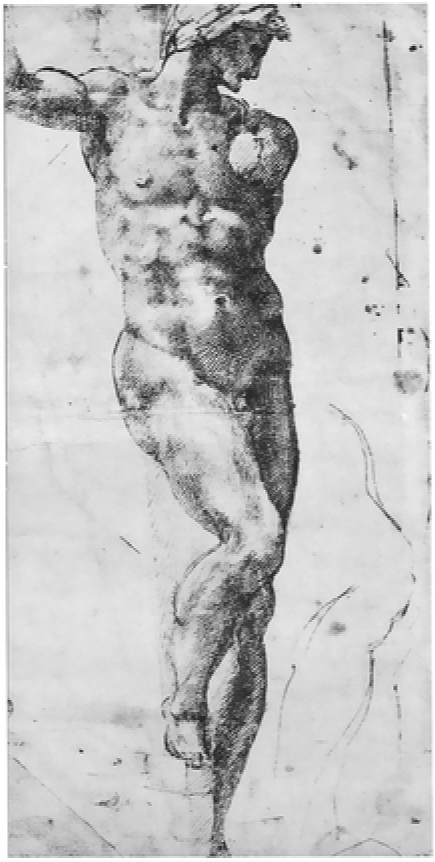
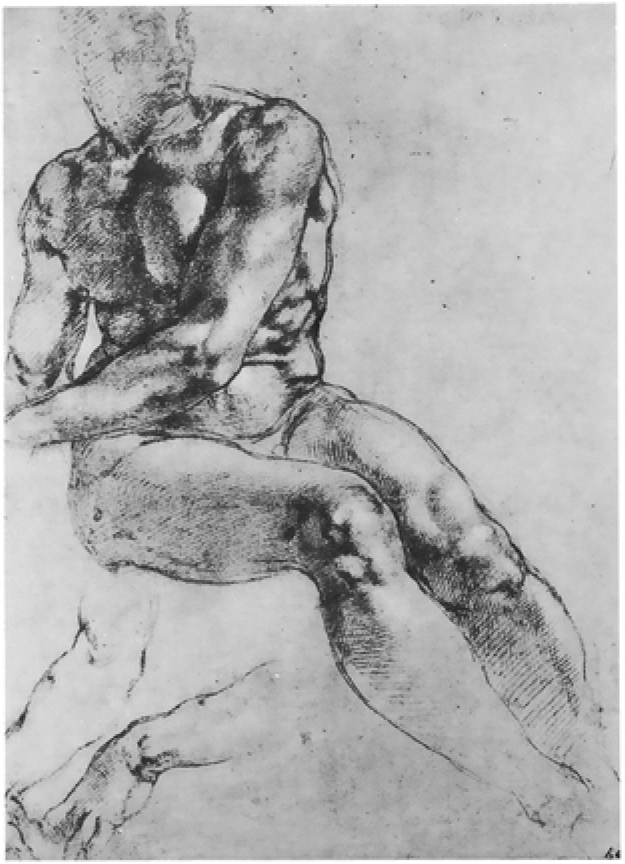
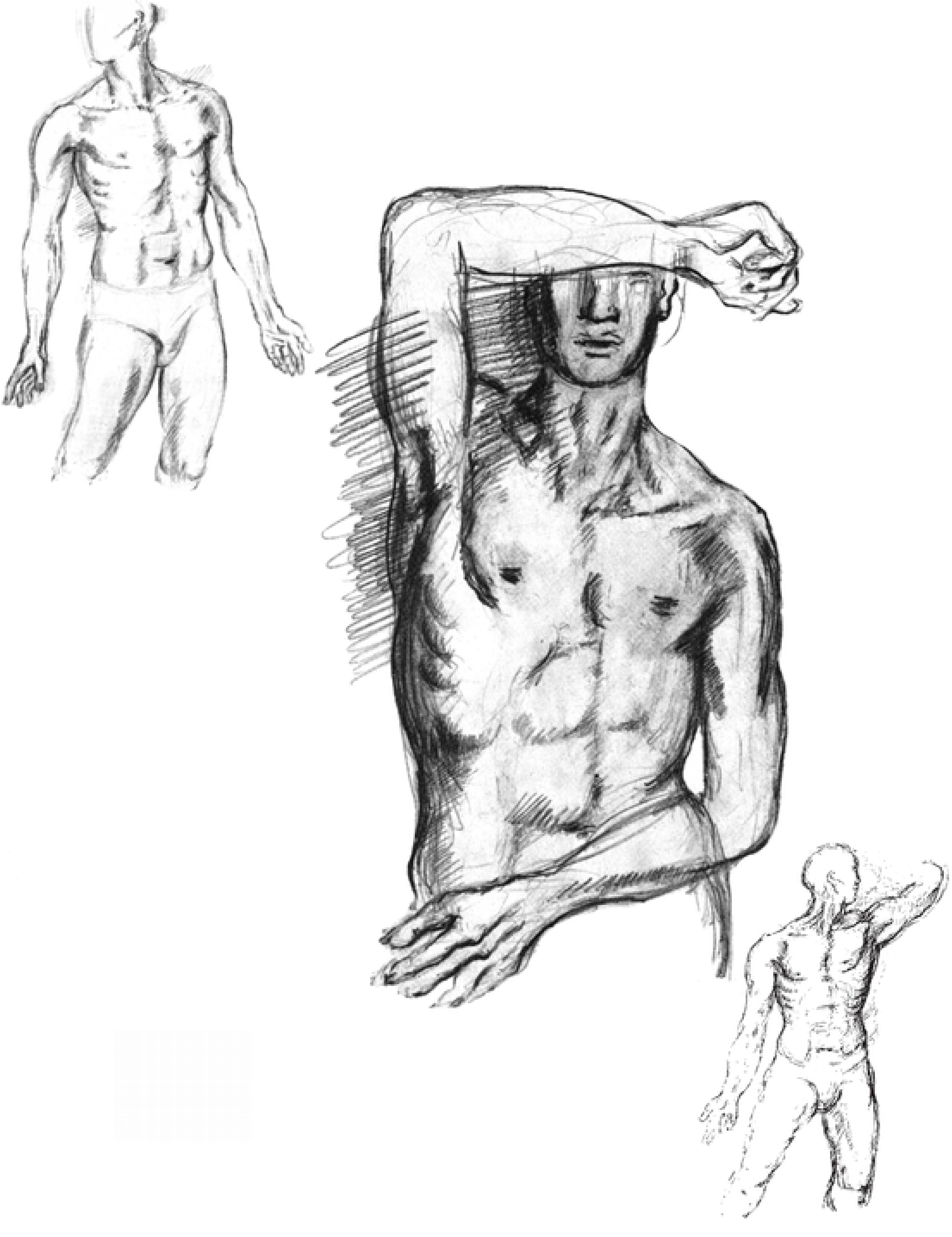




MICHELANGELO

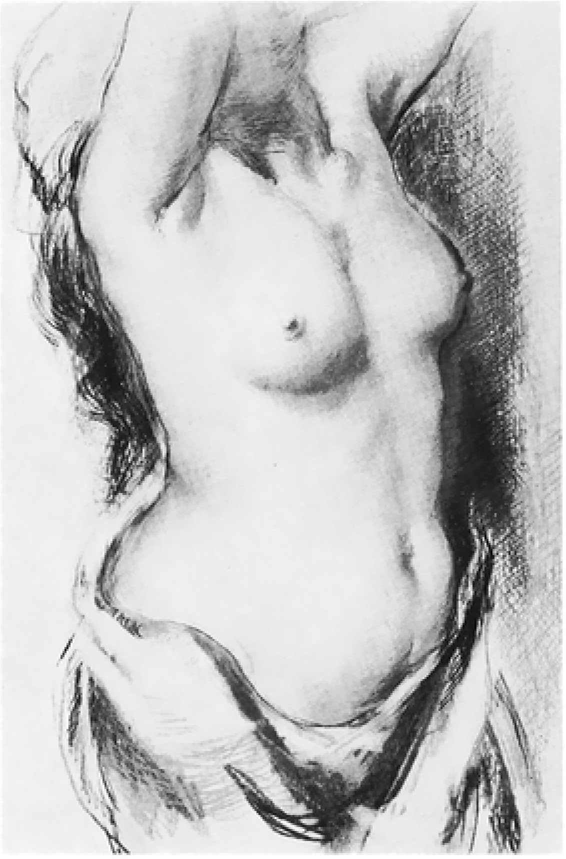




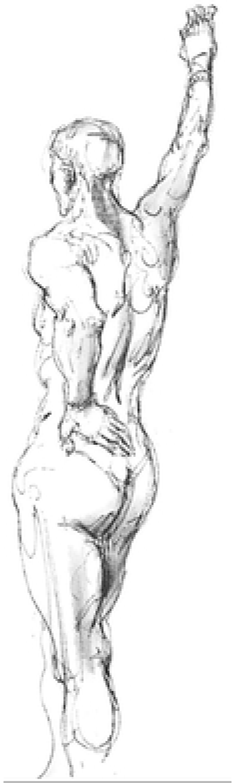


DOBKIN

CORBINO



REISMAN



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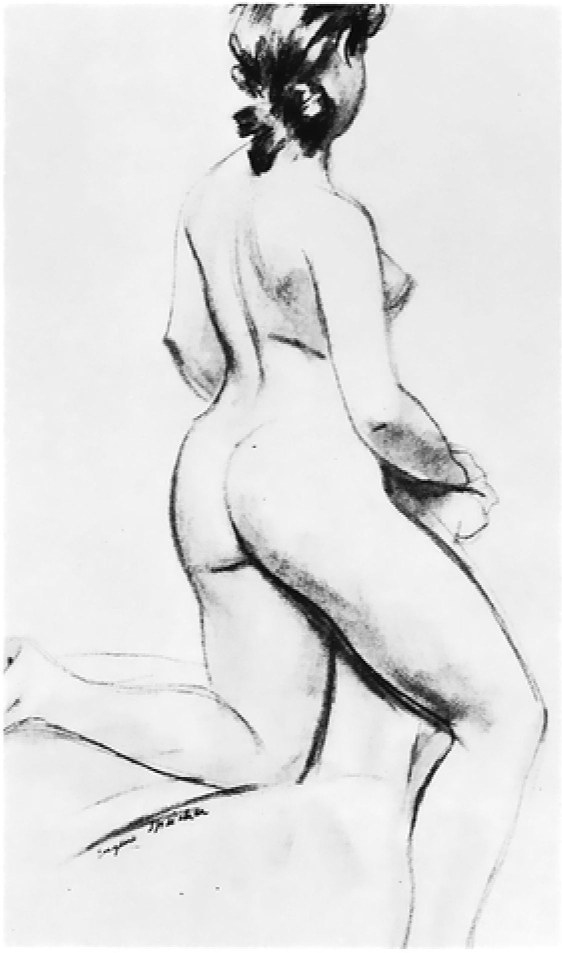
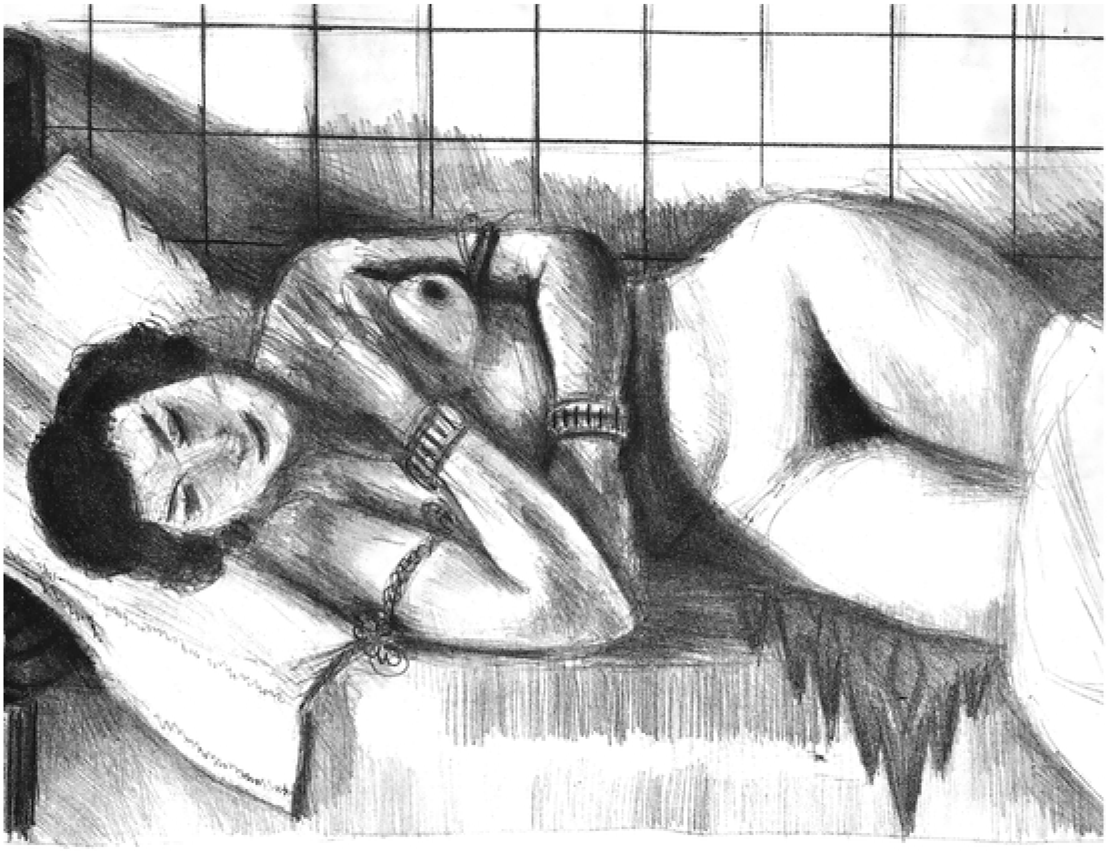
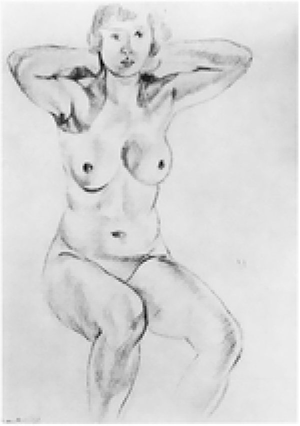
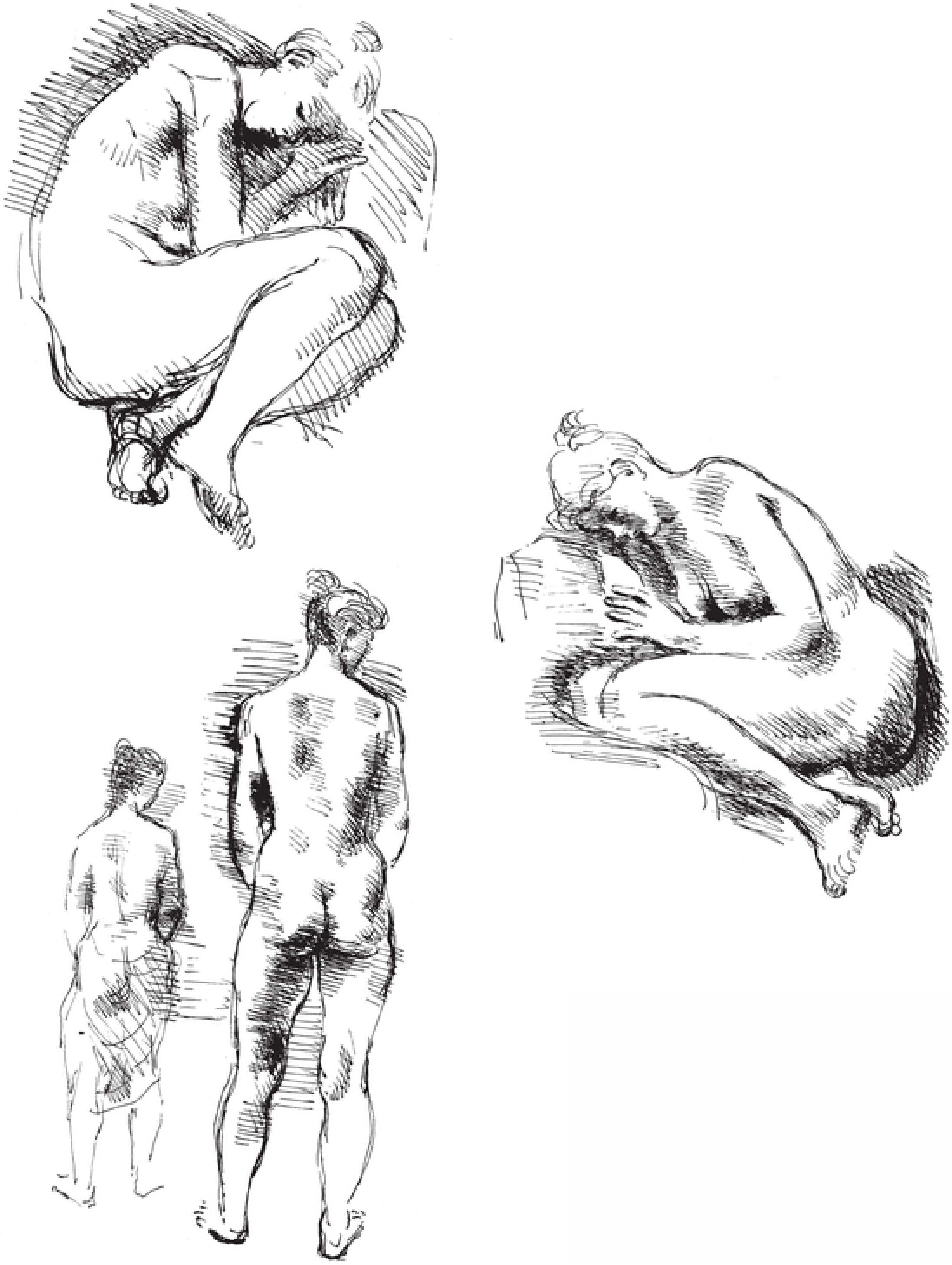


SPEICHER

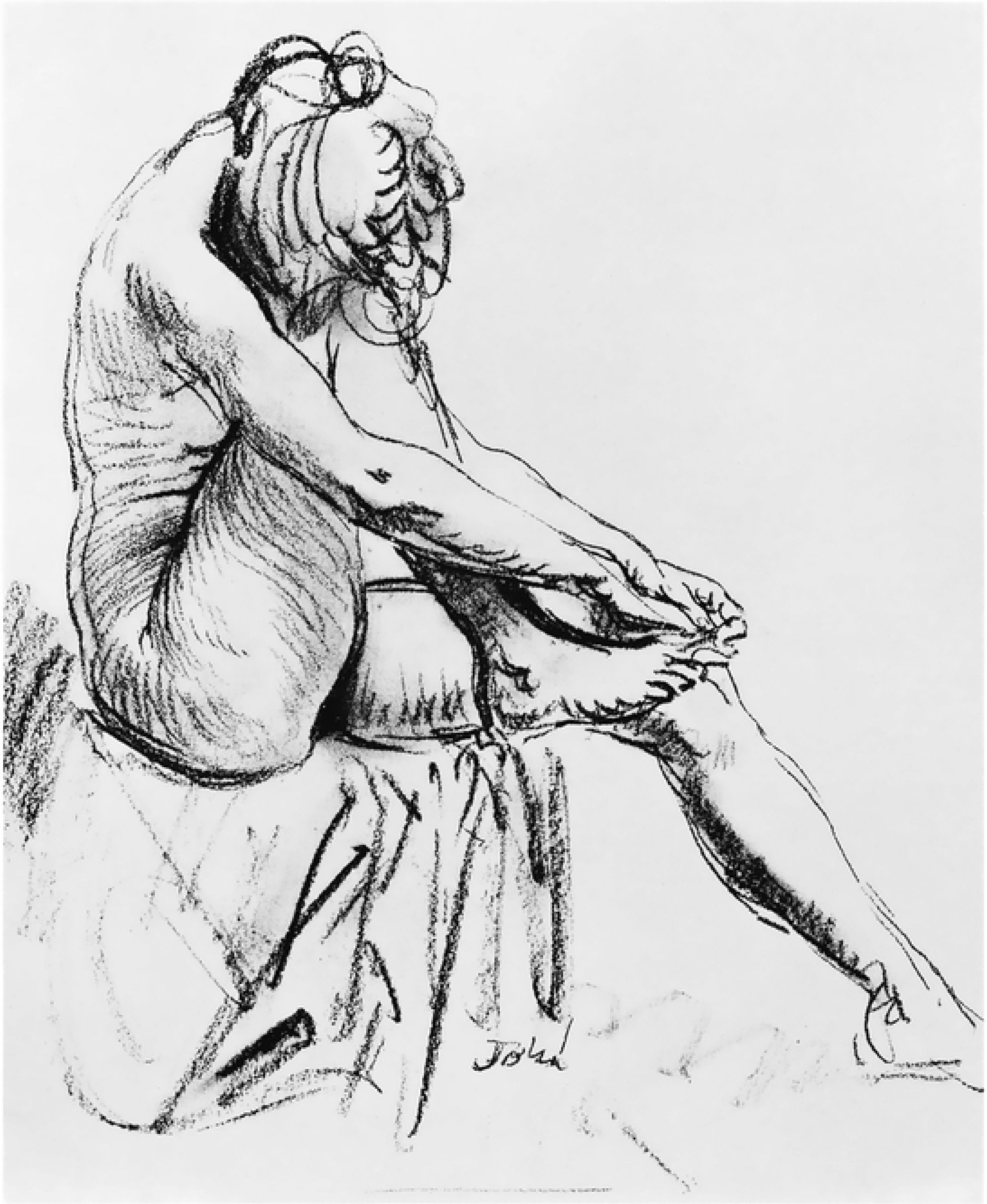




MATISSE is widely known as a painter of canvases remarkable for their color harmonies, structure, and pattern. Fewer people know him as the outstanding draughtsman that he is. He observes his model keenly, often doing drawings of the same pose in many different ways. Note that when the model is lying, her weight upon the bed creates a pressure that forces her pelvis upward. The result is that her hips rise above every other part of the body.

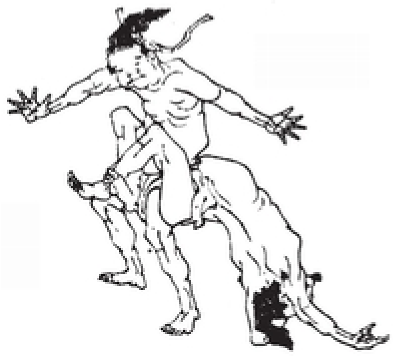


MOSES SOYER



JOHN

Action and Motion



HOKUSAI

MOST people can tell when a drawing is out of balance. We have an instinctive feeling that one side of a form is heavier than the other, and that the heavier side will tend to fall over unless the weight is shifted to make both sides balance, as one might balance a pound of meat on one side of a scale by an equivalent weight upon the other. Another way of preventing the heavier side from falling is to buttress or support it.

A model, in assuming a pose, will naturally adjust her body so as to maintain her balance. The problem for the artist is to recognize what happens to the body when that adjustment is made. If the student feels that the figure he is drawing has a tendency to fall, he must reexamine the weights very carefully to see if one side balances the other. If it becomes obvious that in that particular position an equivalent distribution of weight is impossible, it means that the legs are in no position to support adequately the part of the body which seems to be tumbling.

All sides are obviously balanced in a figure that supports itself equally on both feet. Even if one foot is forward, the body can still balance itself without any difficulty.

But when one leg supports the body, things begin to happen. (1) The supporting leg becomes shorter, more muscular, and a little thicker than the free-moving one. (2) The side above the leg that carries the entire weight is pushed upward a little more than the other. (3) The torso immediately adjusts itself to a new condition which may be stated in a few words: (a) on the side where the hip is high, the shoulder is usually low; and (b) the supporting leg moves toward the center of the body. Note, too, that the muscles of the supporting leg, especially the upper part and around the knee, become more prominent. (See also *Fig. 40*.) In viewing the body in profile, the stresses are even more apparent. Here the fact that the “free” leg is longer and flabbier becomes quite obvious.

When a body leans against another object, or when its entire weight is used as a pressure against a tool, such as a pneumatic drill, the figure is no longer supported by its own legs, but by the object against which it rests. This may be called an artificial means of balancing a body. Many such means of supporting a figure have been contrived by the artist. But a figure thus supported must still look convincing. It must never be unstable or appear to be falling. When a man presses against a shovel he has a job to perform. He creates an added pressure to force the shovel into the ground. When a body is leaning leisurely against a wall or a table, it is up to the artist to impart a sense of rest and comfort to his figure.

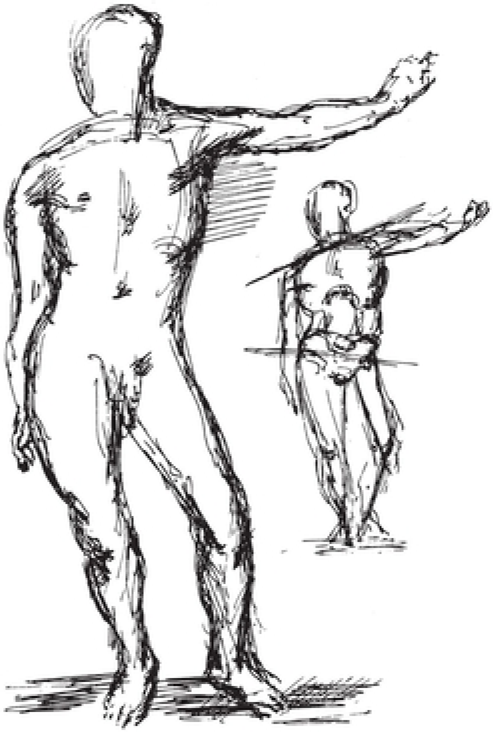


Fig. 48
In a "classical" position, the high hip is on the side where the shoulder is low. The best way of remembering this kind of action is to think of "high hip, low shoulder."

Motion presupposes absence of balance. A drawing of a figure in motion simply means a split-second shot of a body moving in space, usually running, falling, jumping, or dancing. The difference between action and motion is not necessarily the degree of violence of the movement. A position that a model can take and hold for a reasonable length of time is *action*. A position that a model cannot hold is defined as *motion*.

The artists who are interested in motion or violent action have generally developed a speedy stroking of the brush or pen that is compatible with a sense of movement. Their pictures are usually built up of many nervous strokes, without attempting a full depiction of solidity and bulk, but convincingly suggesting definite forms and shapes.

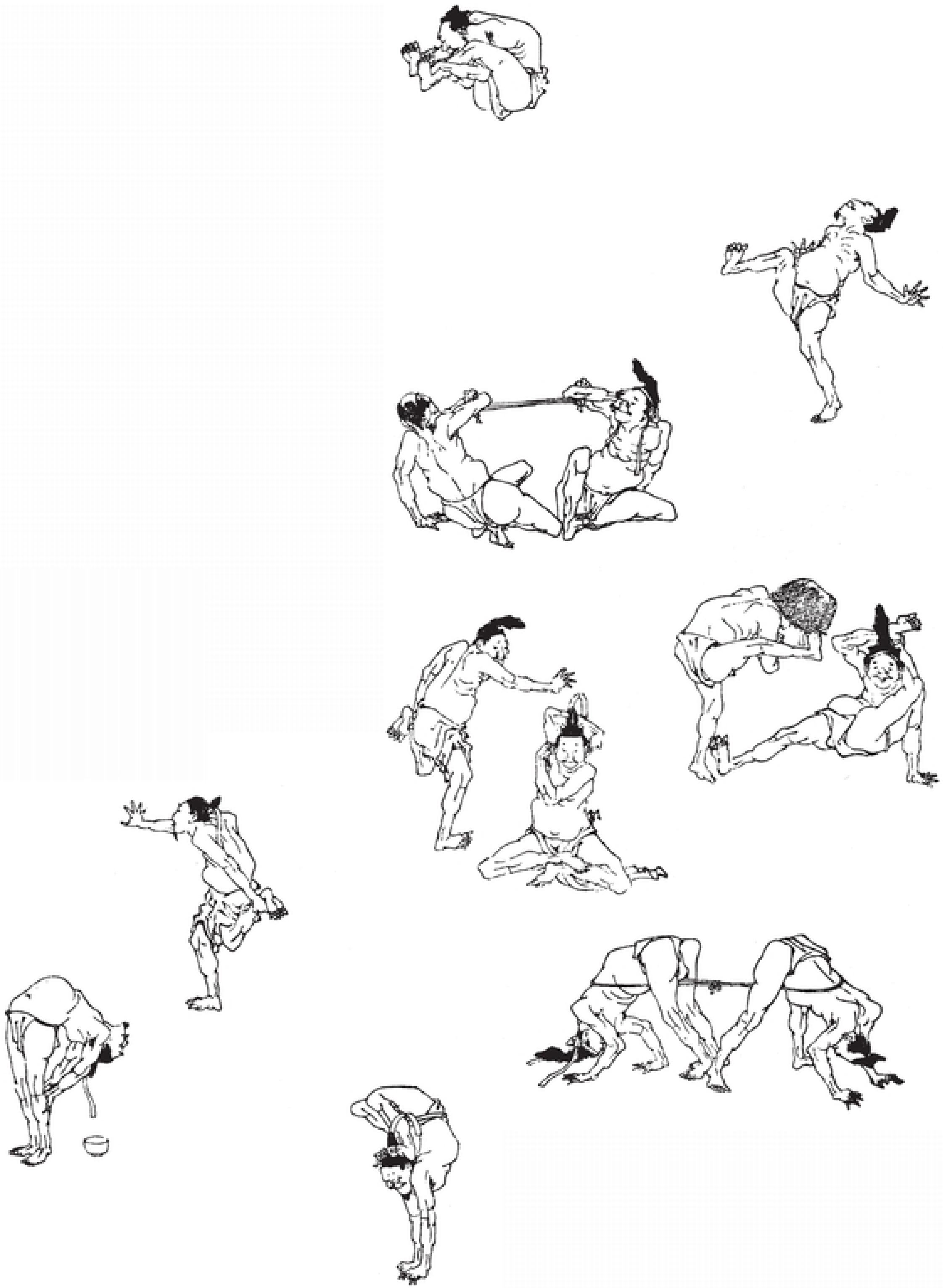
Daumier, for example, was often interested in violent action. But although sketchy in quality, his drawing always possesses the mas–terly touch that makes it live. The seemingly casual lines are really never as accidental as they seem. On the contrary, they contribute to the meaning and form of his figures.

The futurist school of painting which prospered in Italy and France for a short period after the First World War used multiple lines to symbolize things in motion. Cartoonists were quick to pick up this style, and today in our comics motion is still expressed by repeating a line over and over again. It is very common, for example, to see a running dog pictured as having more than four hazily suggested leg forms.

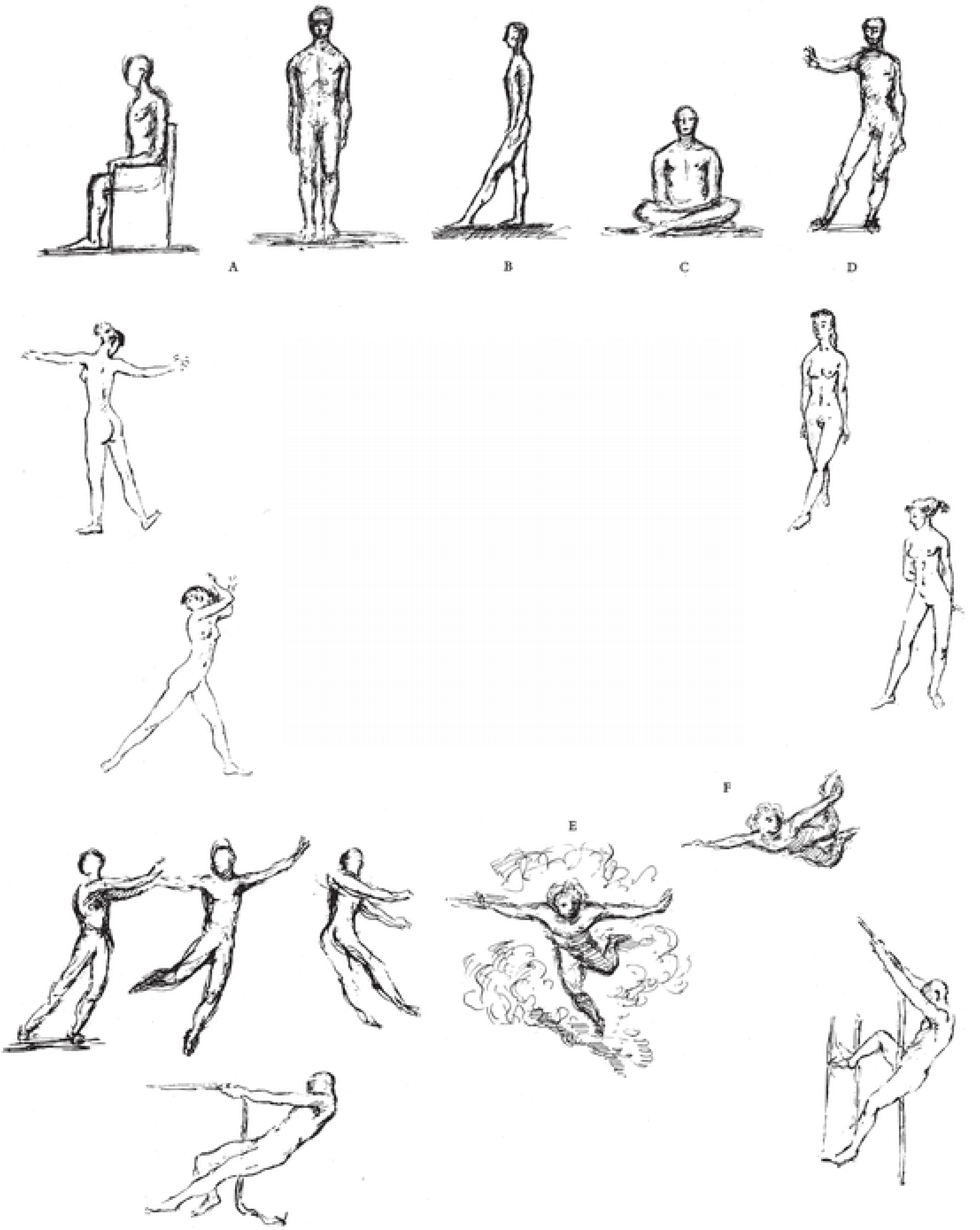
There is a difference between action and motion. The figure in action may mean but a slight twist or turn of the body, limbs, or head. A body may be in action, yet perfectly balanced and able to maintain its position. A figure well balanced, with legs side by side, arms pressed against the sides, may be considered at rest, but as soon as the arms begin to move or the body is no longer balanced equally on both legs, the figure can be said to be in action.

Early Egyptian sculptors preferred to carve their statues at rest, head looking forward, legs together, and arms pressed to the sides. Later one leg was moved forward. The arms, too, began to move. It was comparatively late in the development of art, with the Greeks, that the figure was placed so as to carry most of its weight on one leg. Because of the strong influence of Greek art in Europe, a great many Western standing figures still rest on one leg.

When the figure was taken off two legs to rest and support itself on one, new problems presented themselves. As I observed above, when one of the legs is free to move, every part of the figure falls into a completely new alignment. The leg that is no longer used for direct support and the arms then perform the important function of balancing the body to keep it from falling. This may be demonstrated by a tightrope walker who is not al–ways in motion but who is constantly in action, and who, when he balances himself upon one foot, would never be able to maintain his position if he did not use his arms to distribute his weight in such a manner as to achieve perfect balance.



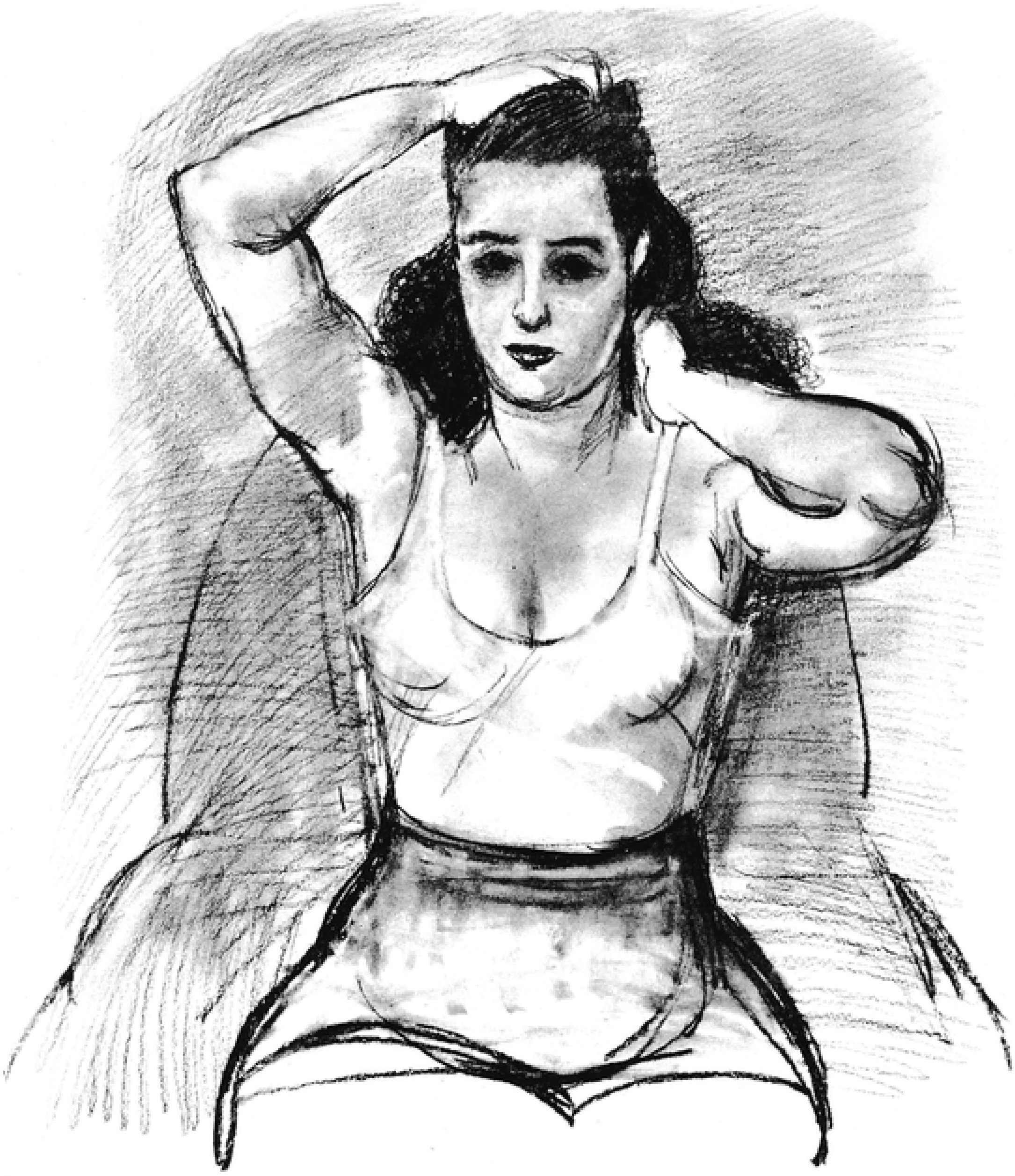
HOKUSAI, the Japanese artist, is considered by many one of the greatest draughtsmen of the East. Certainly his understanding of the human figure *was phenomenal. His virtuosity lay in his uncanny ability to express complicated statements in the simplest and most direct manner.*



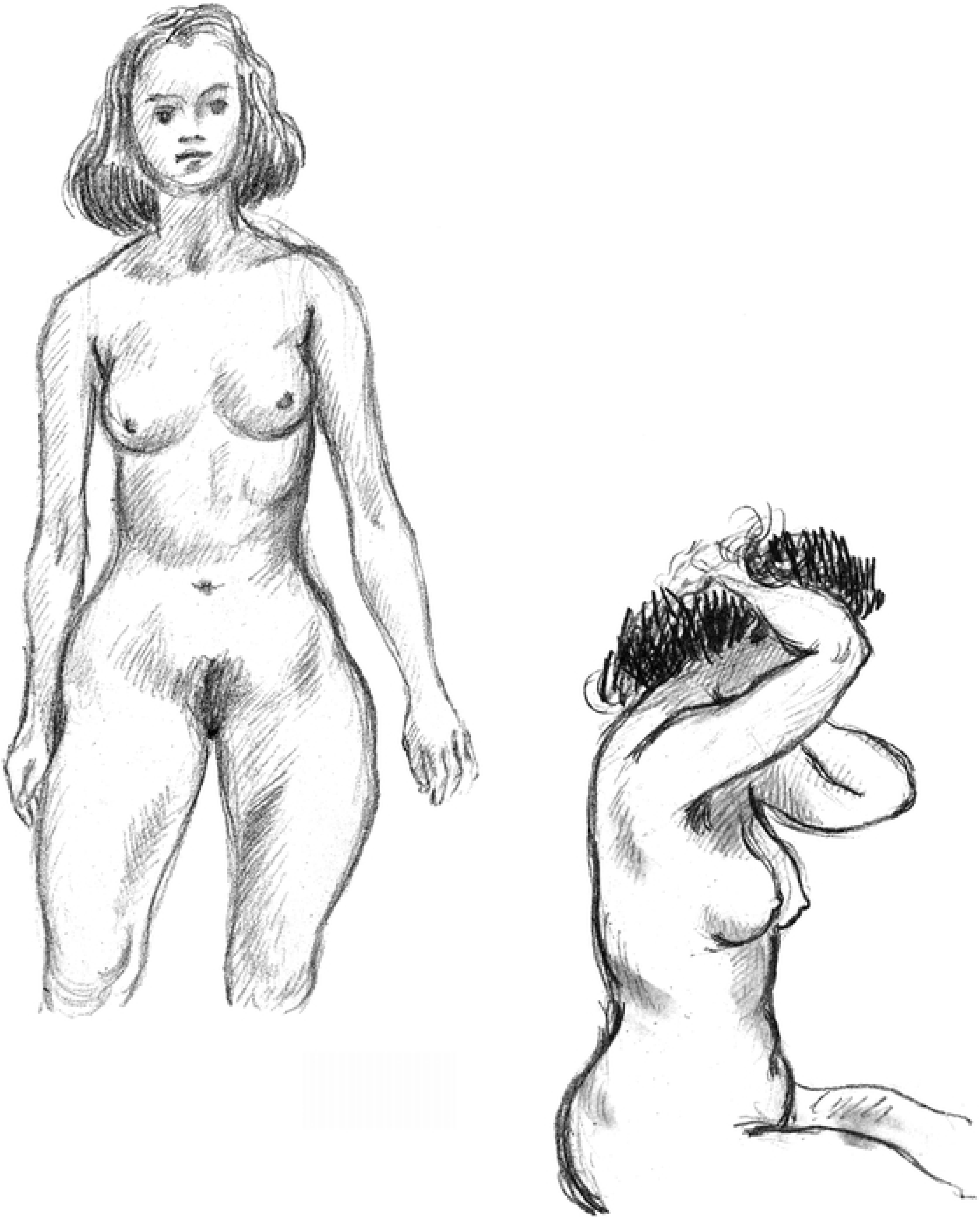
Historically, time and place are often reflected in the action of a figure. Early artists and today’s primitives preferred to make their figures static, *solidly standing or sitting, with feet side by side (A). Later in Egypt the figure was often represented standing with one leg forward but still resting on both of them (B), or else sitting as in (c) (also a common position in Oriental art).*

The Greeks at the time of Pericles, and the Romans who copied them, preferred to have their figures rest on one leg (D). The leg not supporting the body was freed and allowed to move more and more, making for greater movement and greater changes in the entire body.

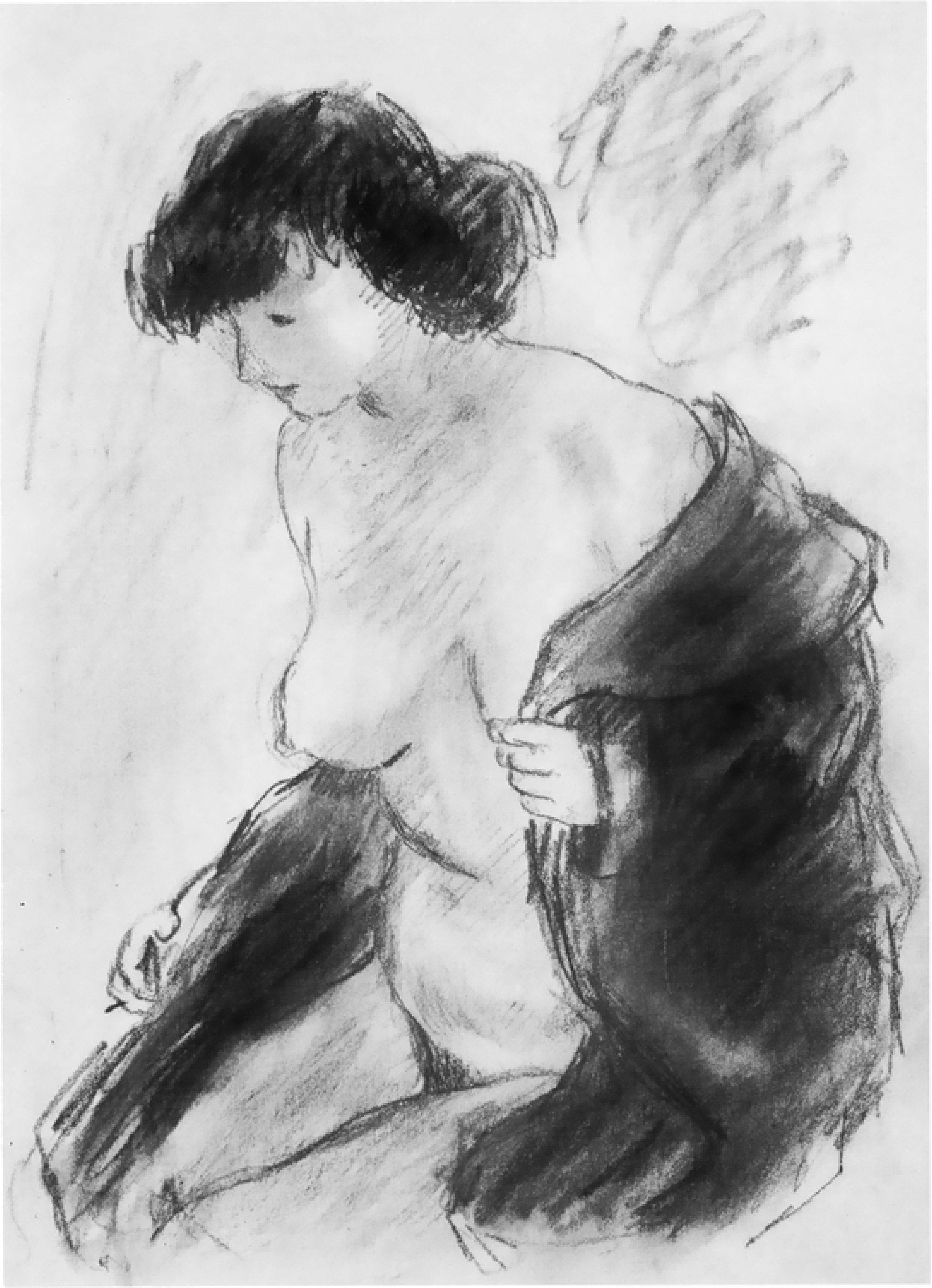
Before long the entire figure took off from the ground alto–gether. During the late Renaissance in Italy it was common for it to fly in space (E). And during the Baroque period in Europe it not only flew but did so with a flair. It assumed all kinds of intricate positions. It was especially fashionable to represent human beings and cherubs not only flying but moving toward or away from the spectator (F).



CIKOVSKY



DOBKIN



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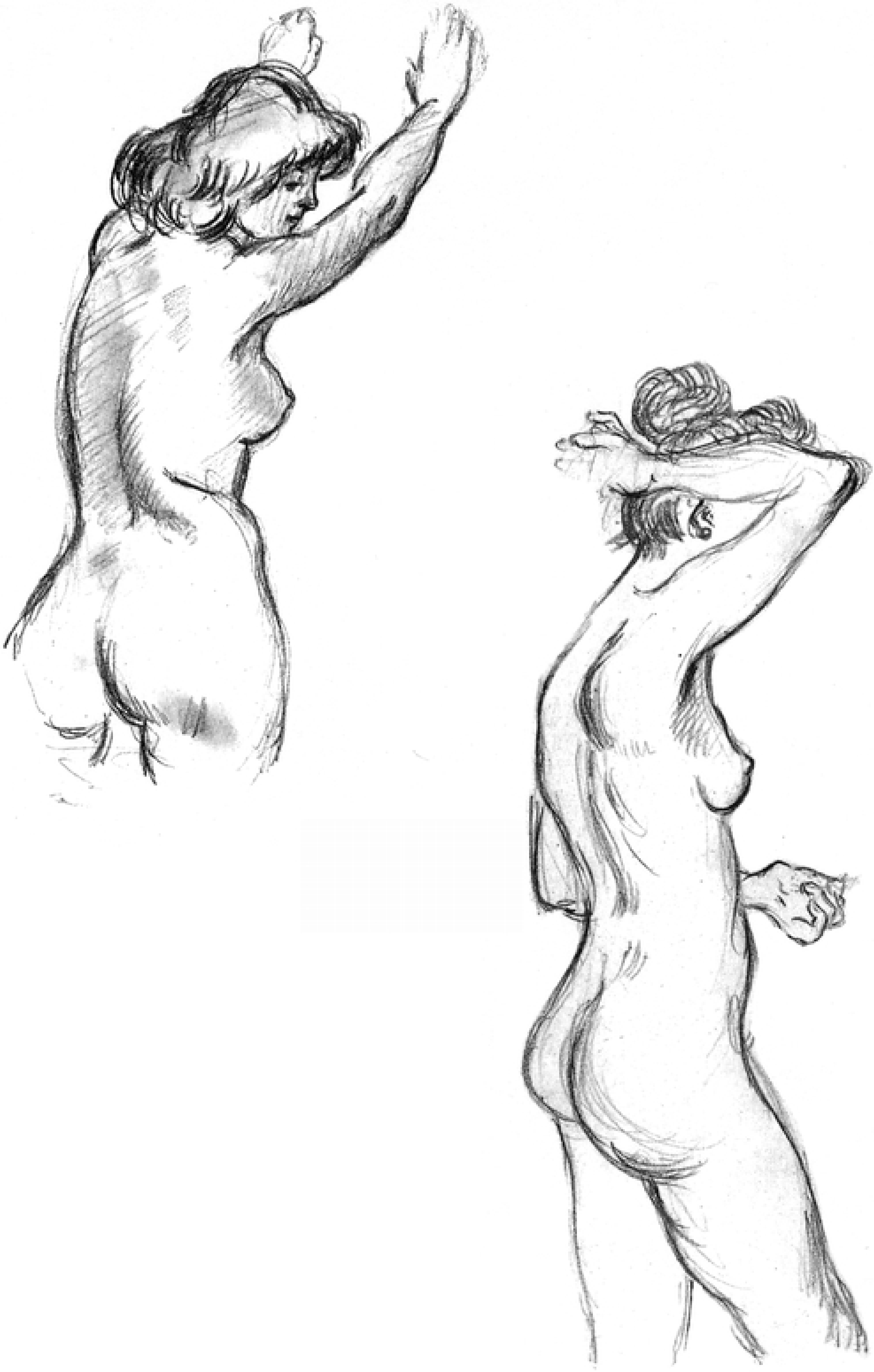

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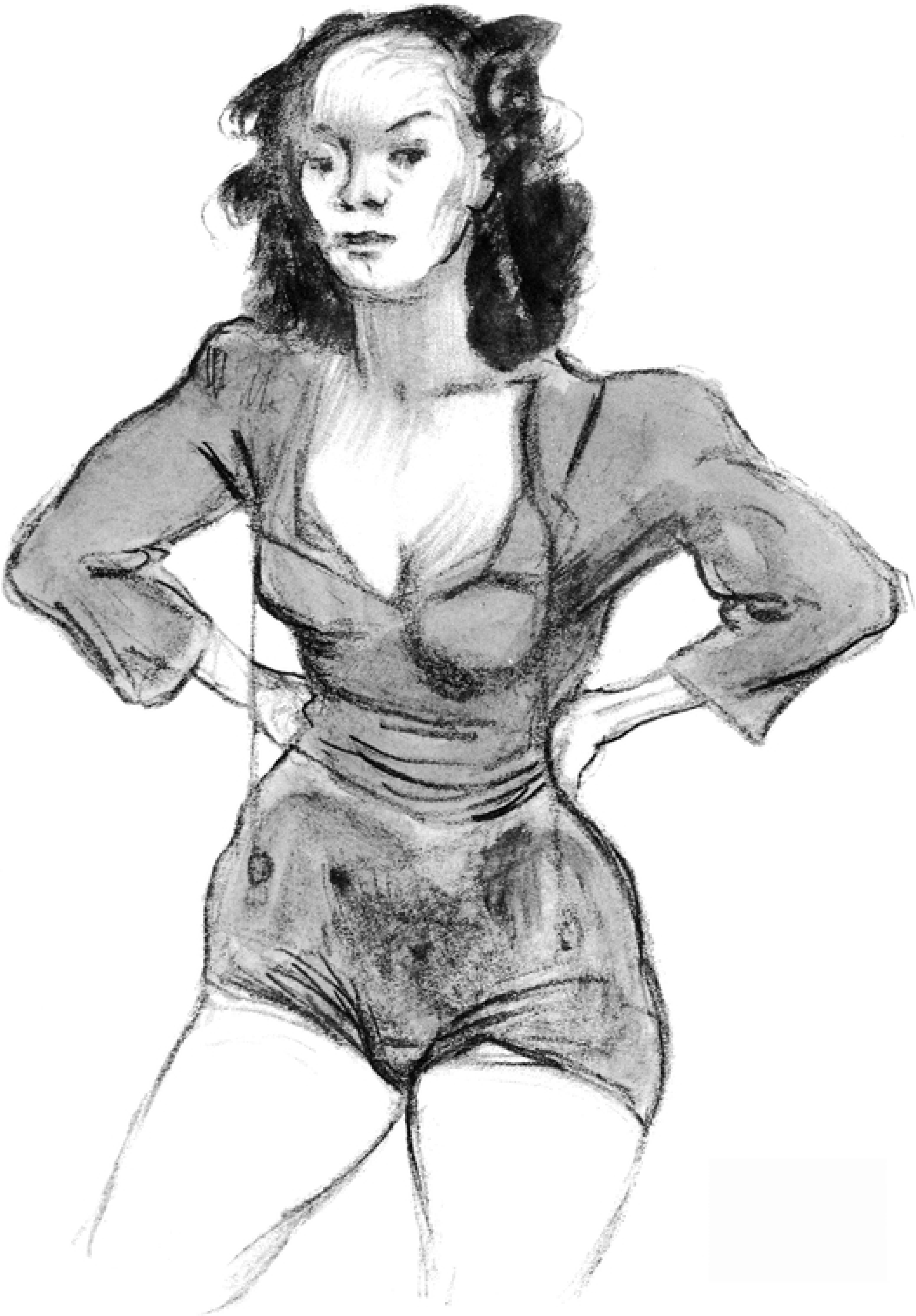

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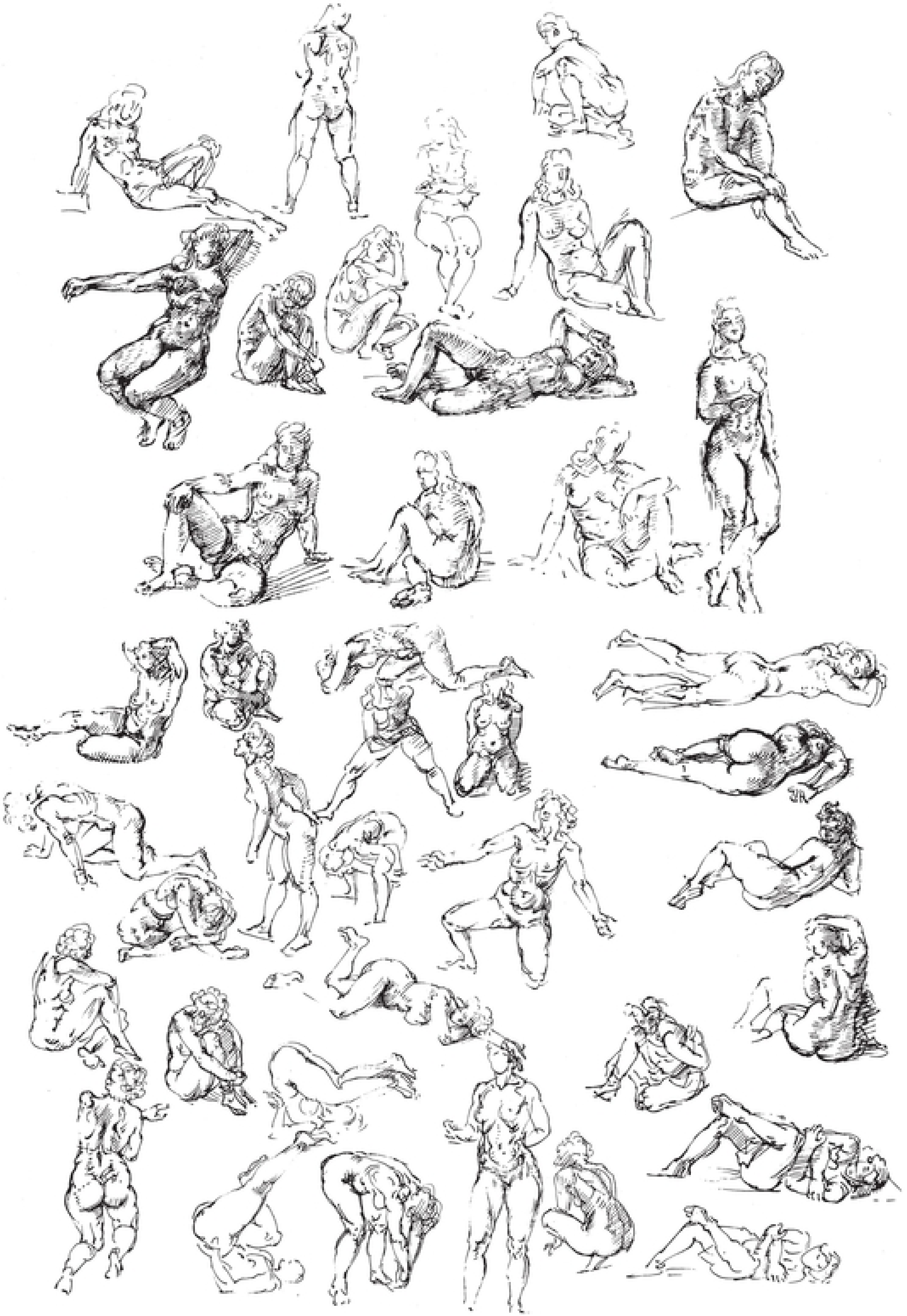
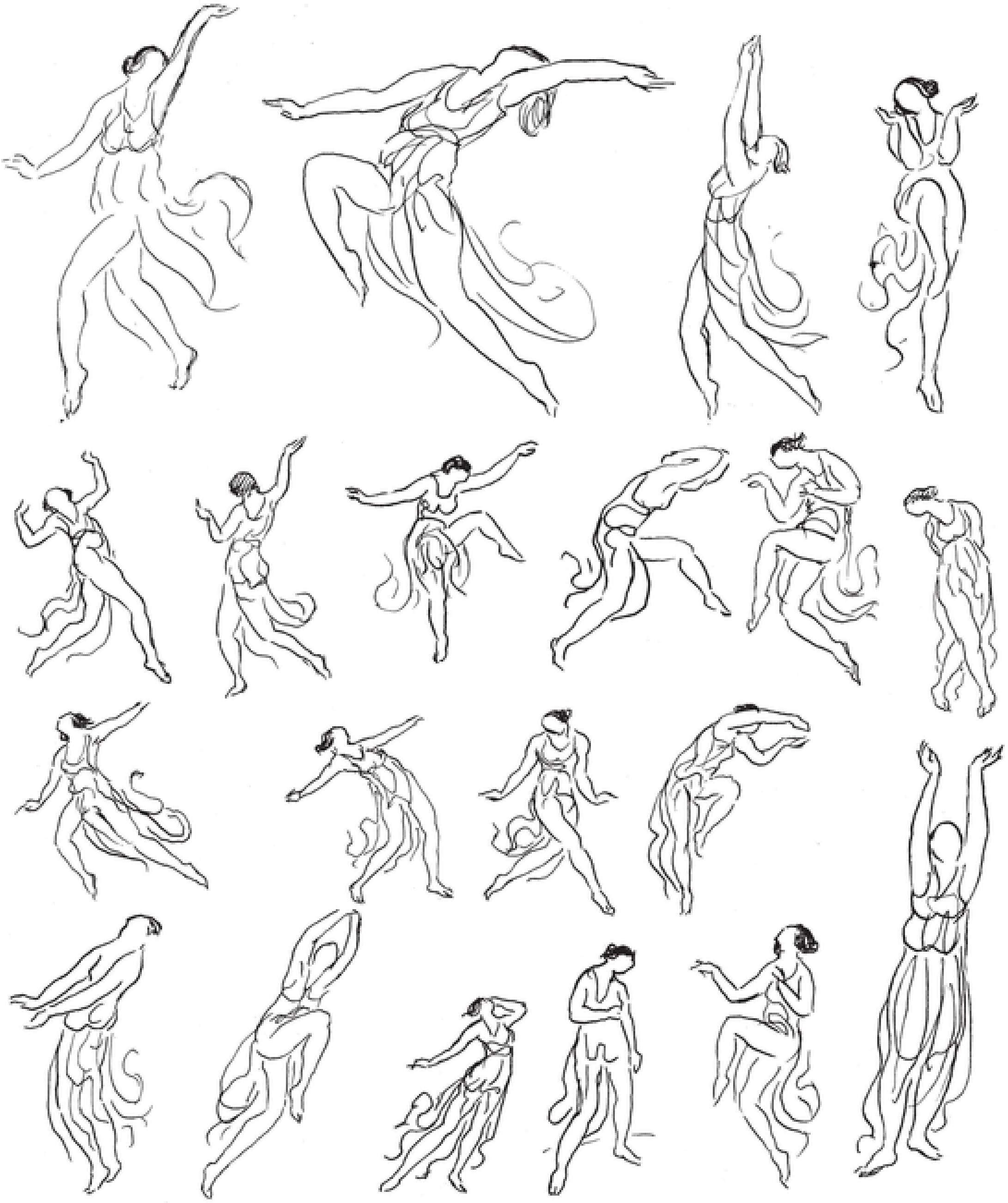
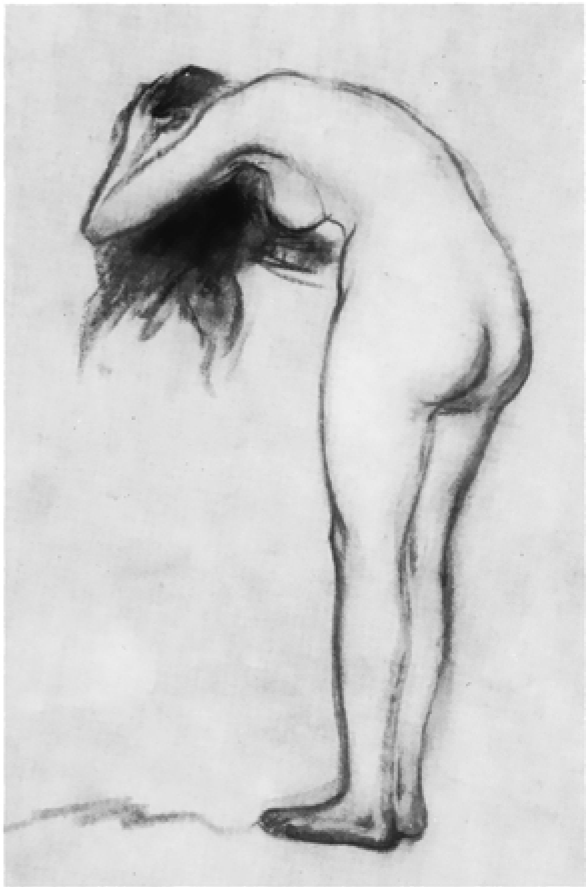


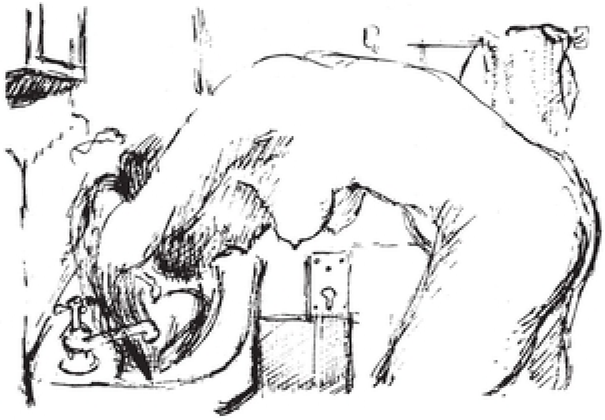
MARSH



WALKOWITZ has made thousands of studies of Isadora Duncan as she danced. His object was to catch her every gesture as she moved. Hence he developed a simple and rapid way of recording what interested him most.



GLACKENS



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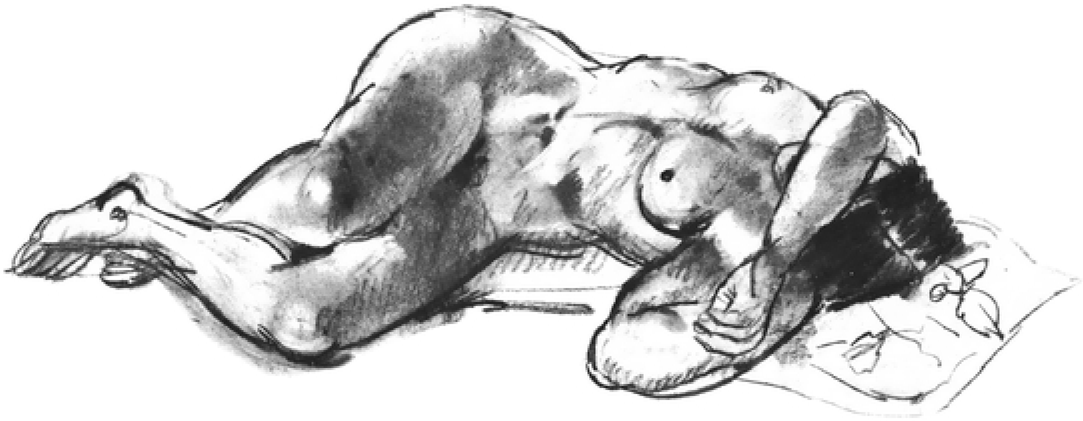

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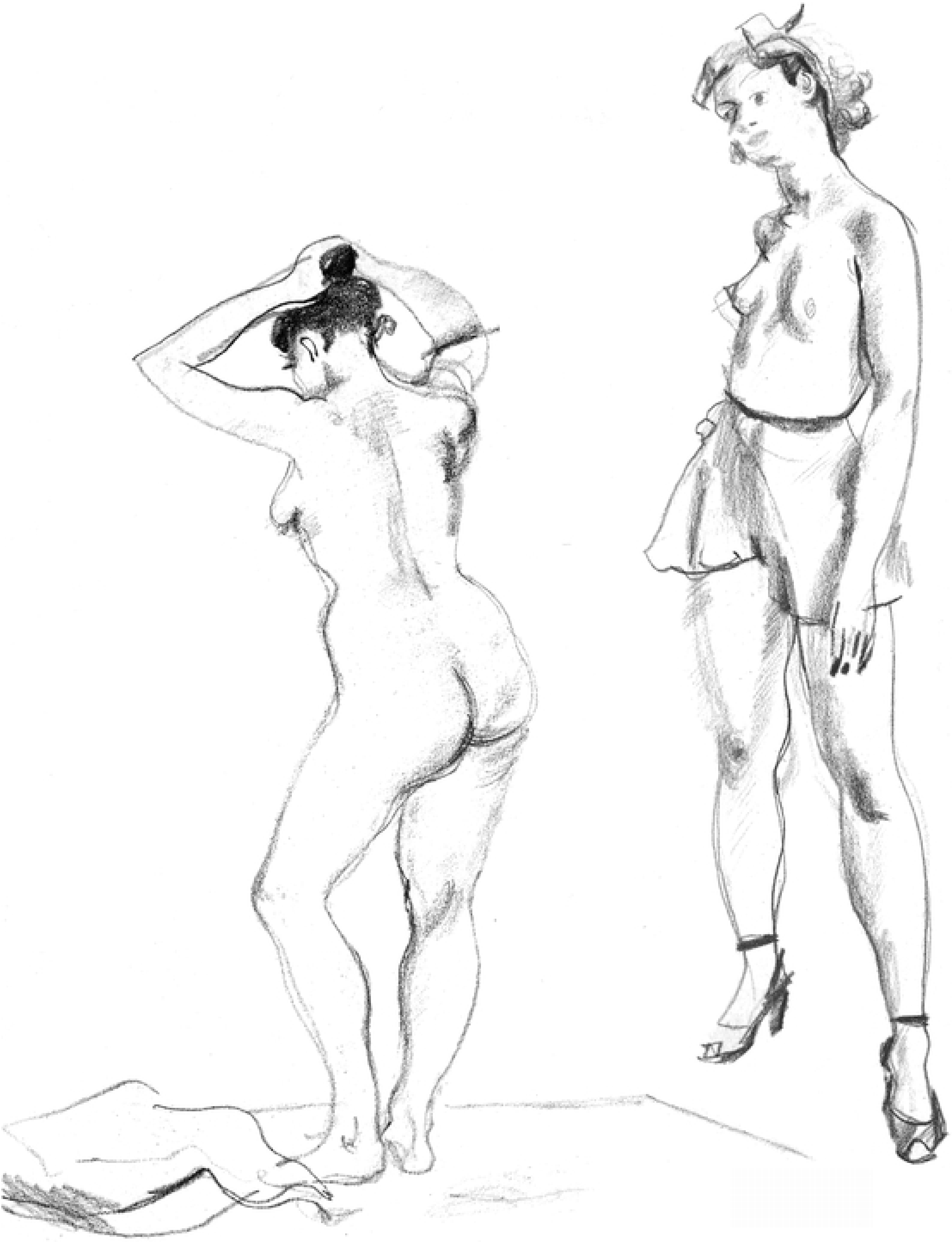
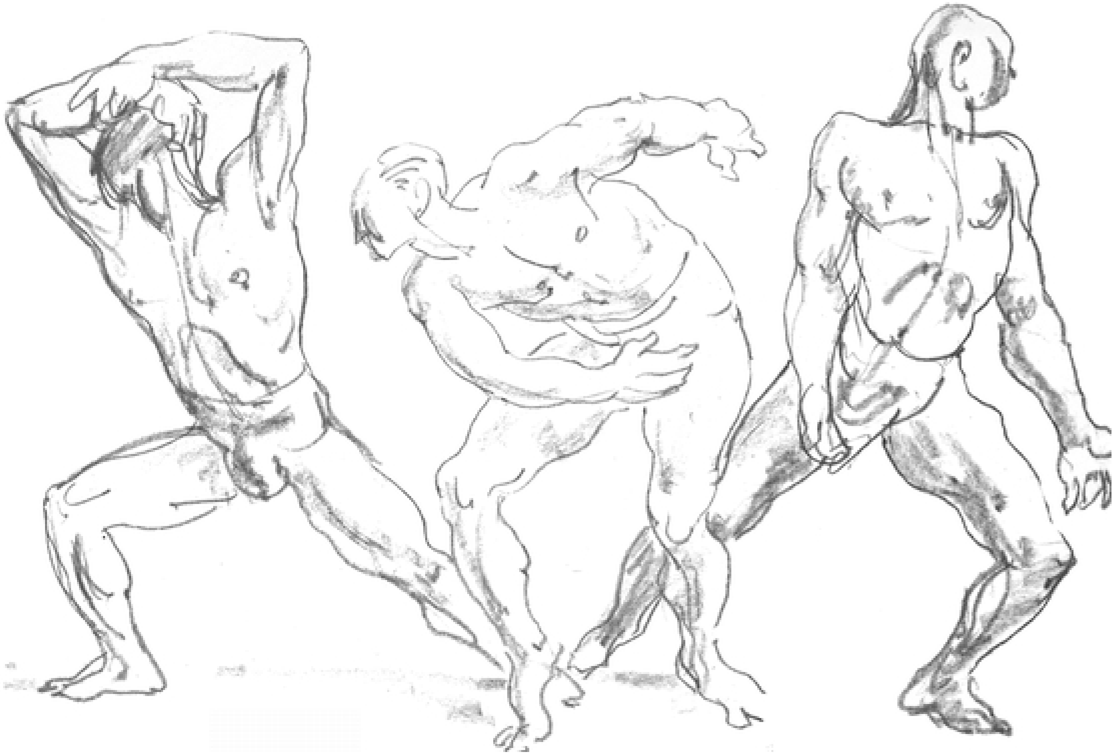
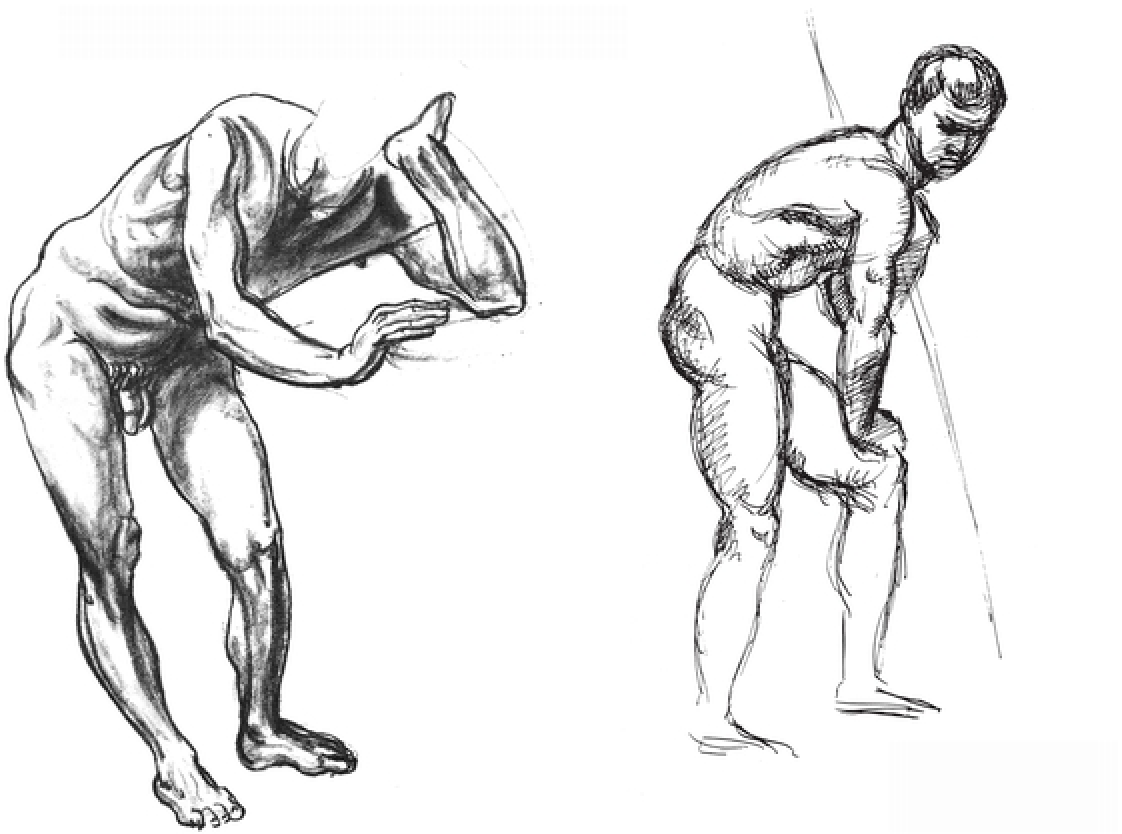


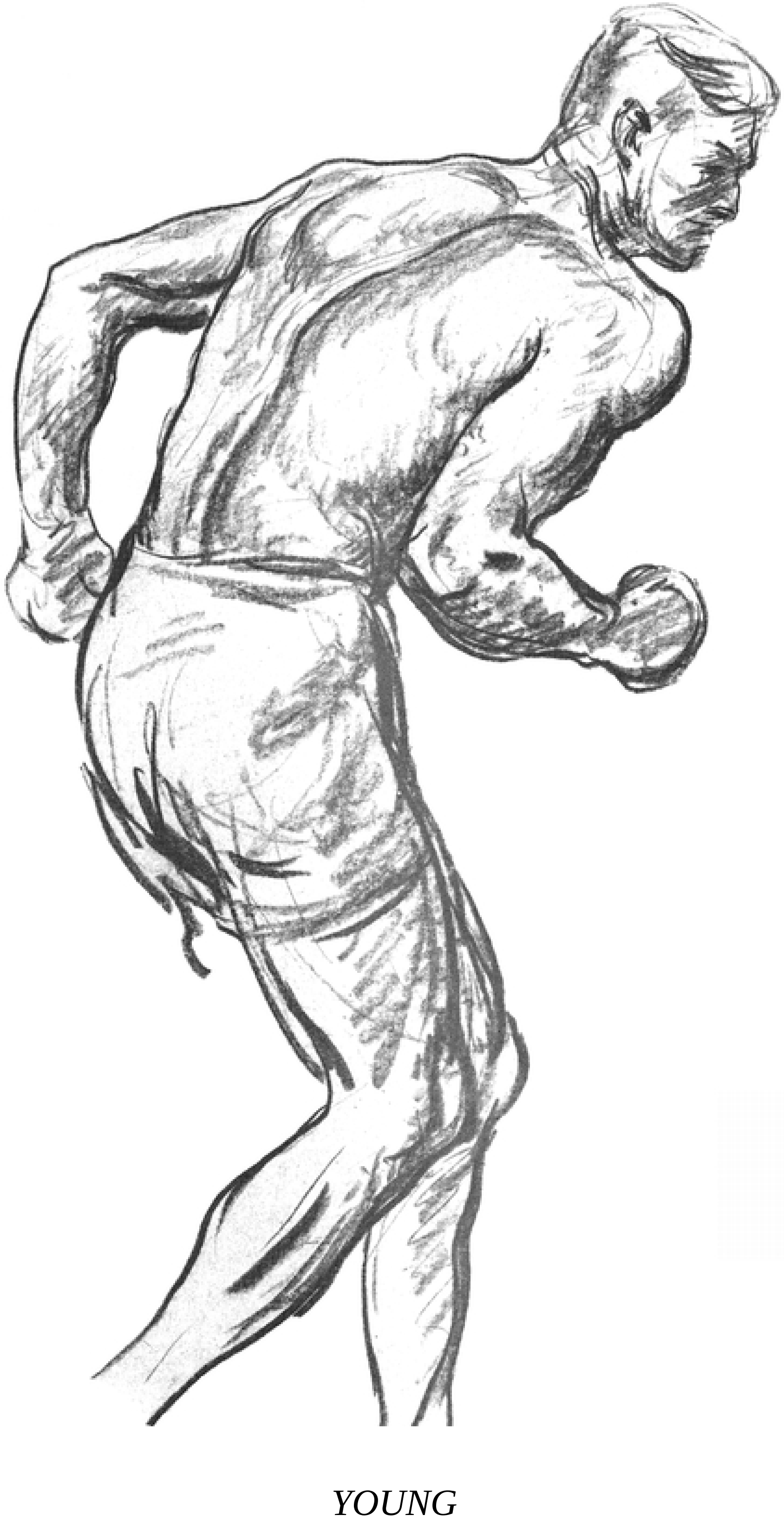
L. BOUCHÉ



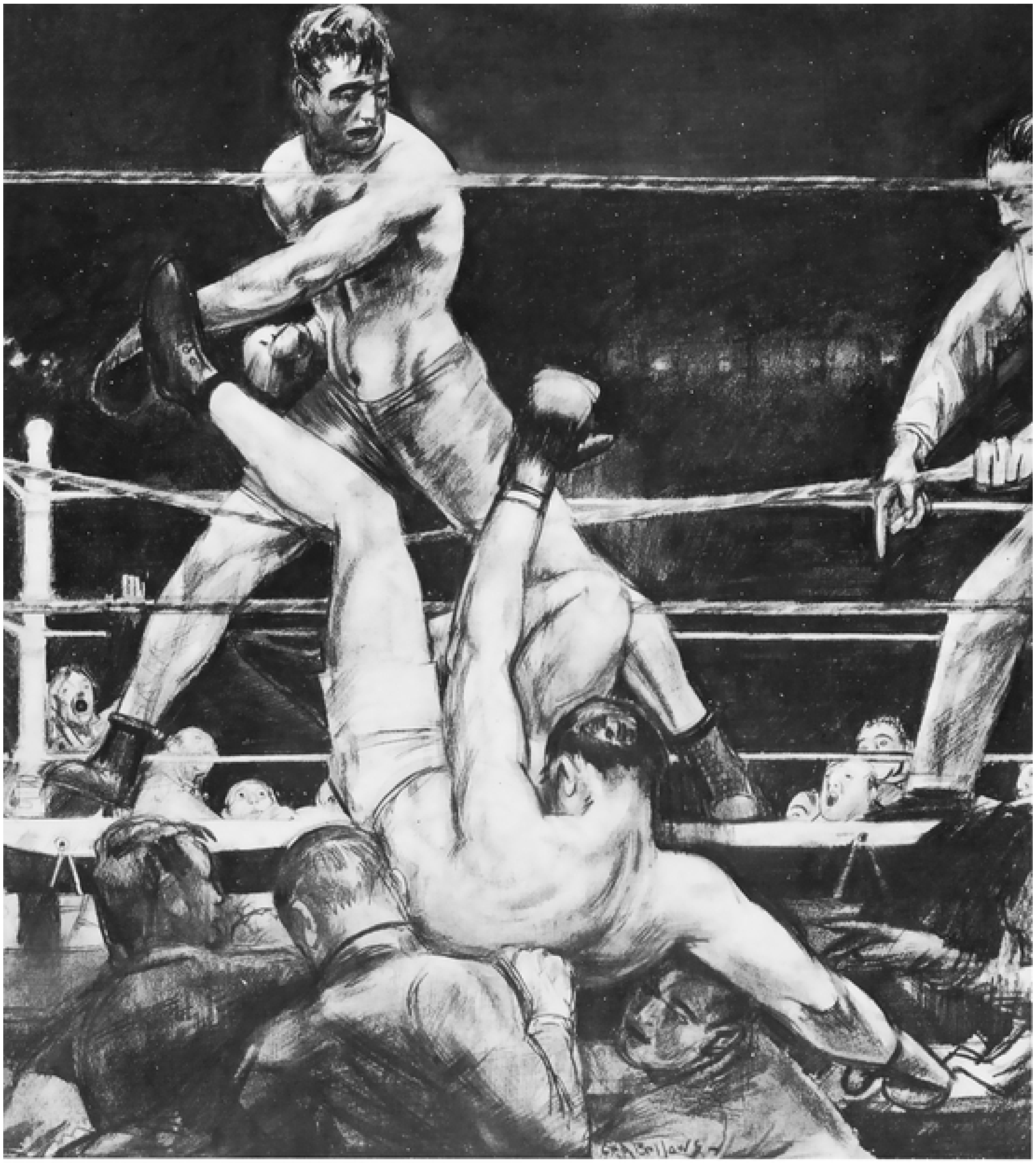
STERNBERG



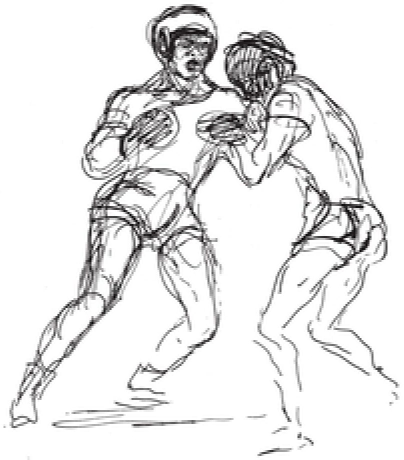
SCHNAKENBERG

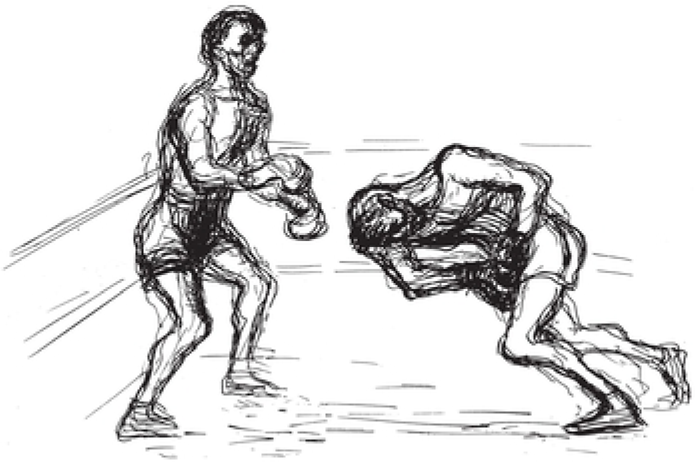


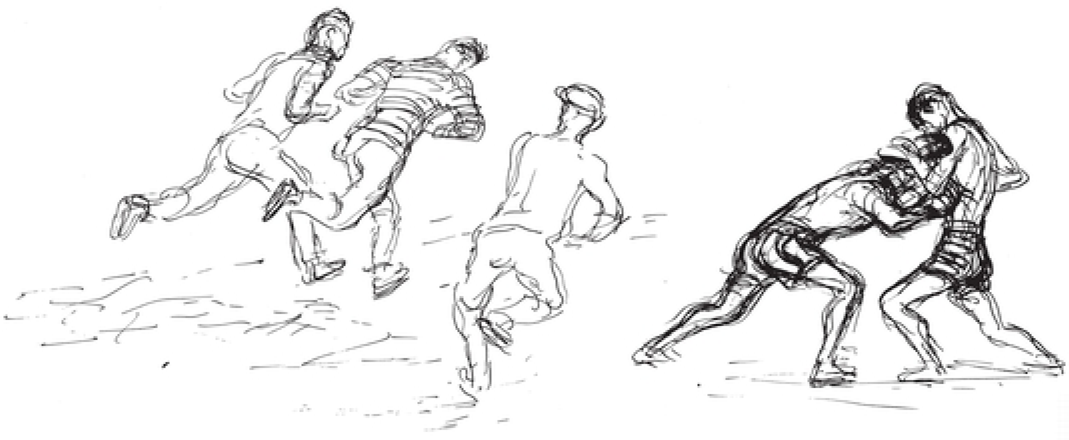
YOUNG


Geo Bellows

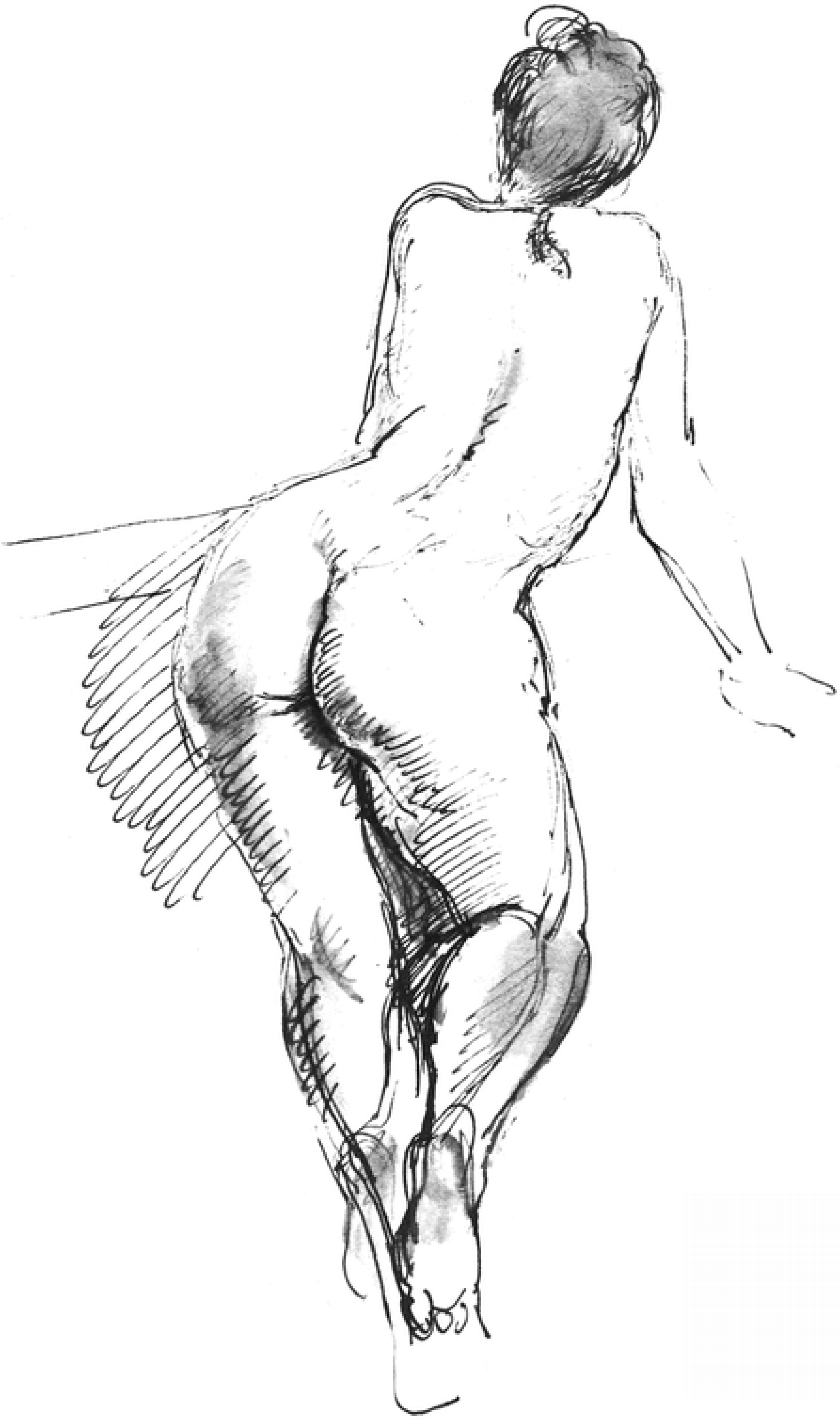
BELLOWS



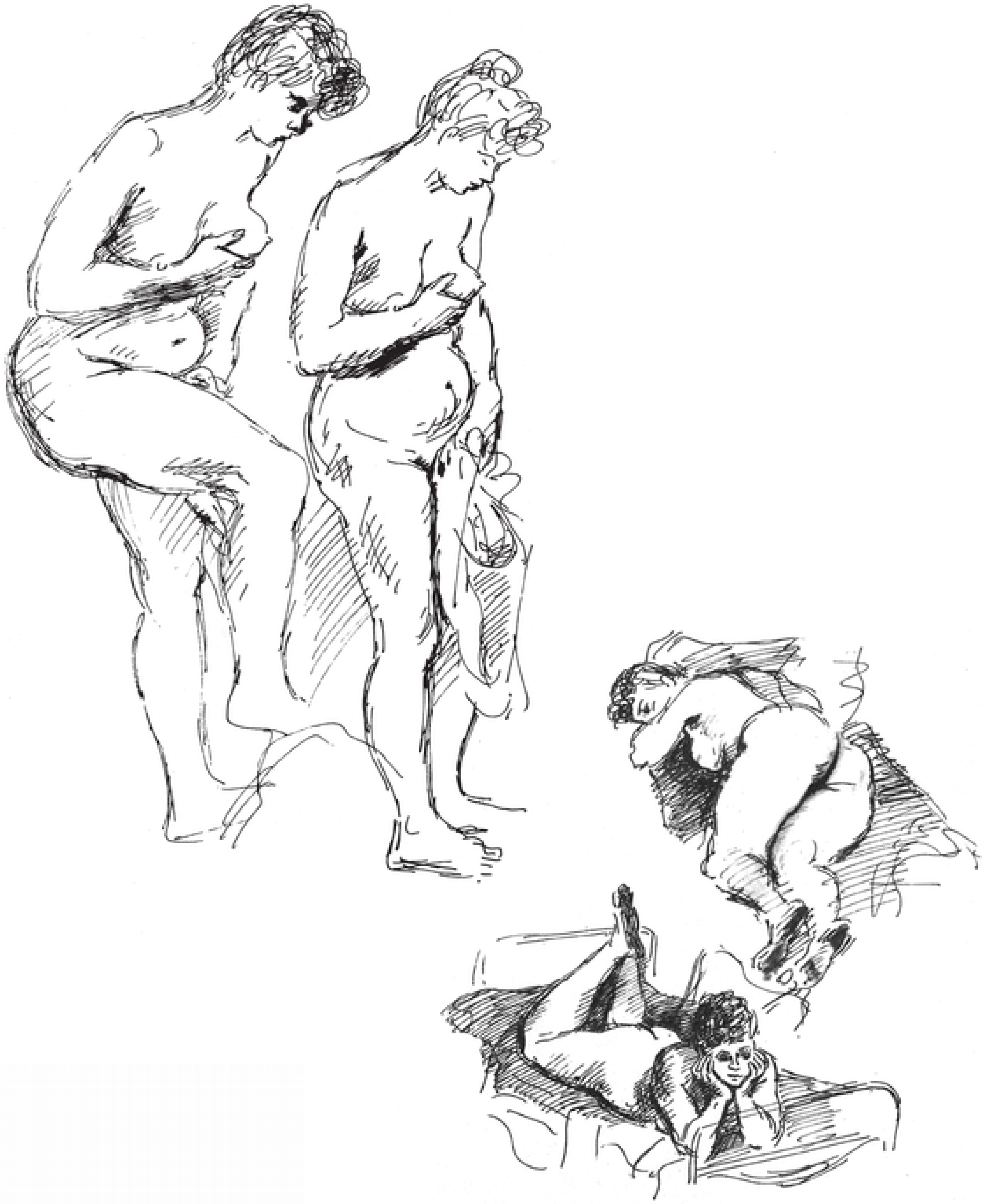




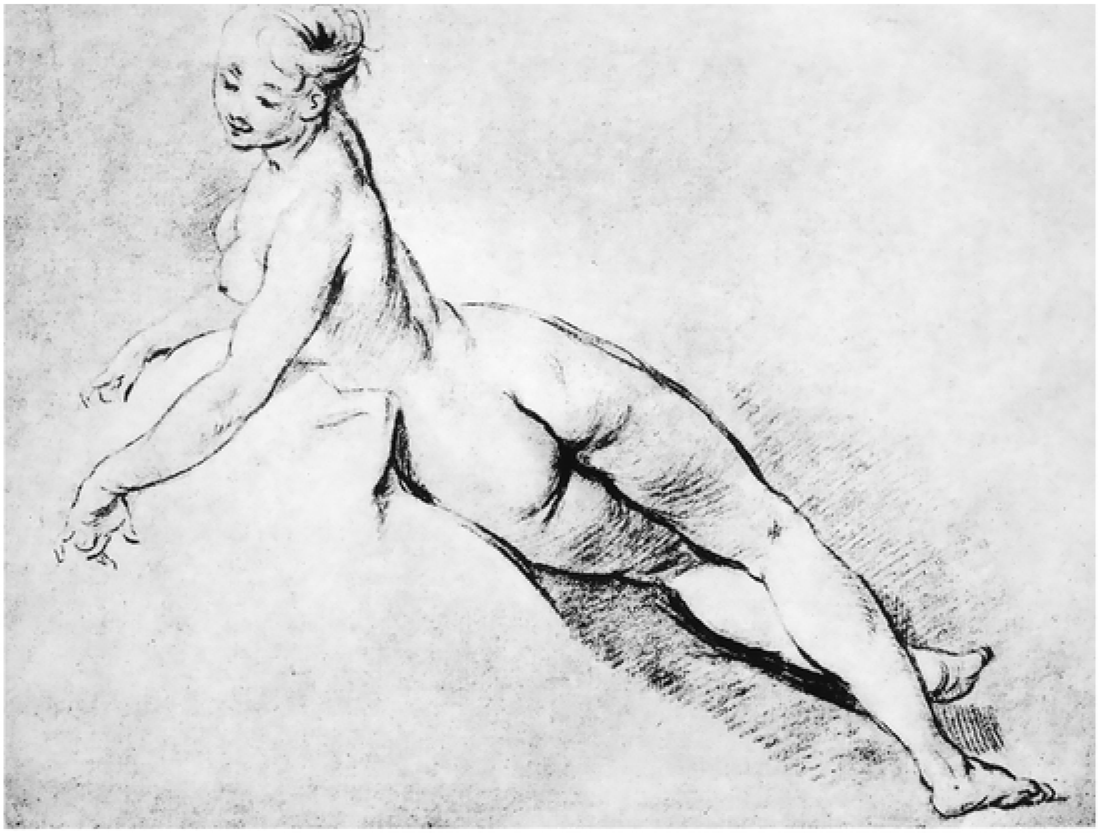
GROTH



RAPHAEL SOYER



RAPHAEL SOYER



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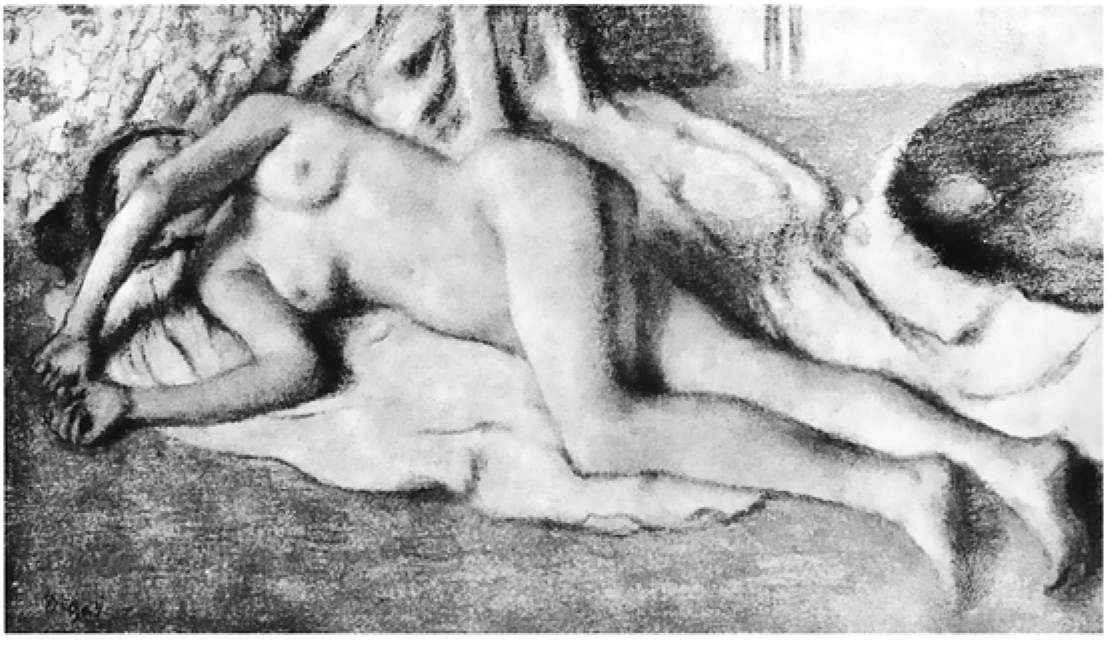
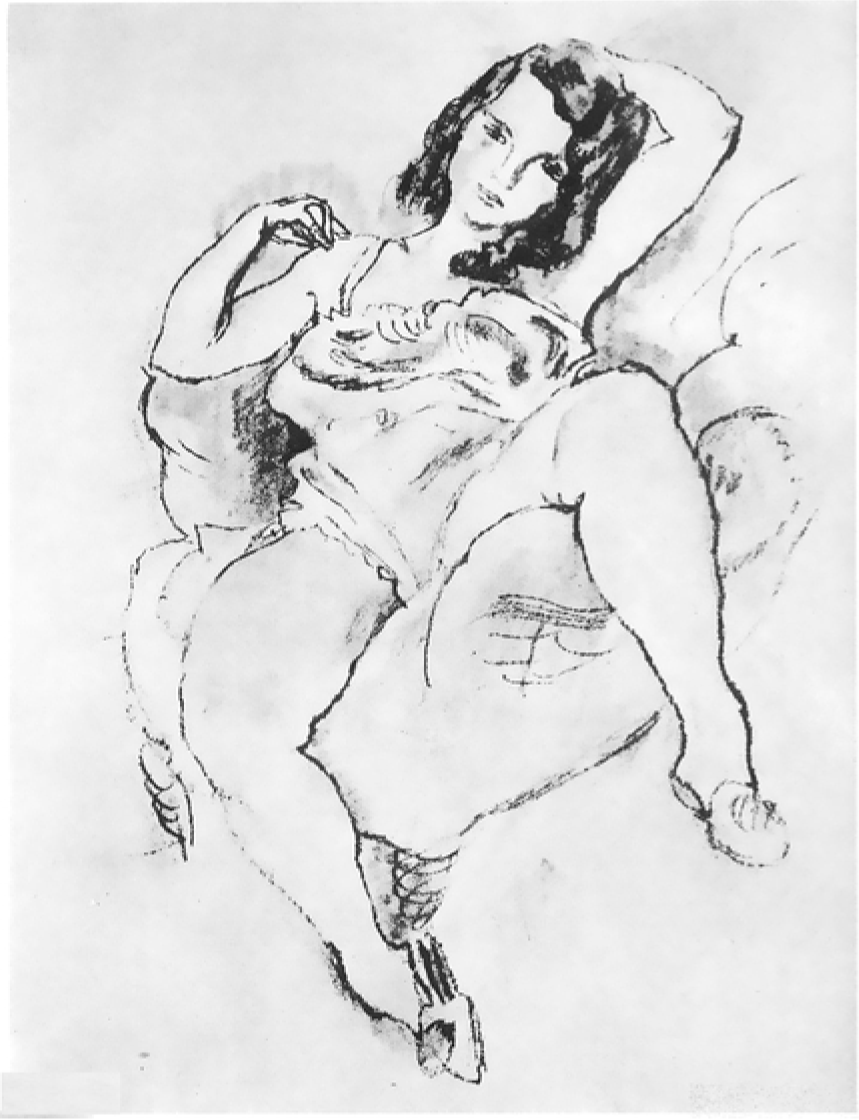
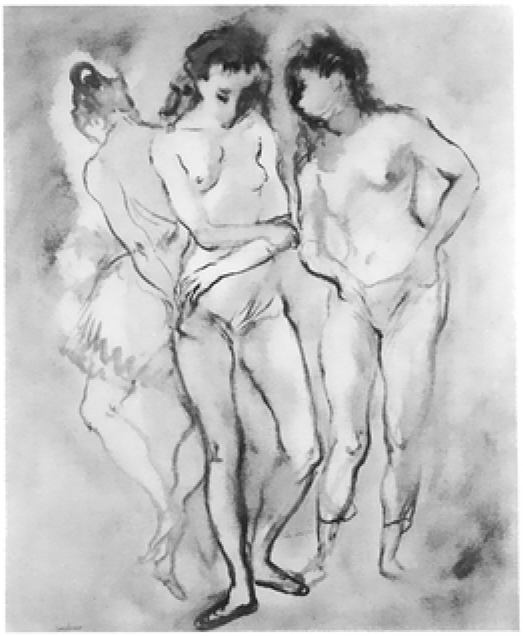


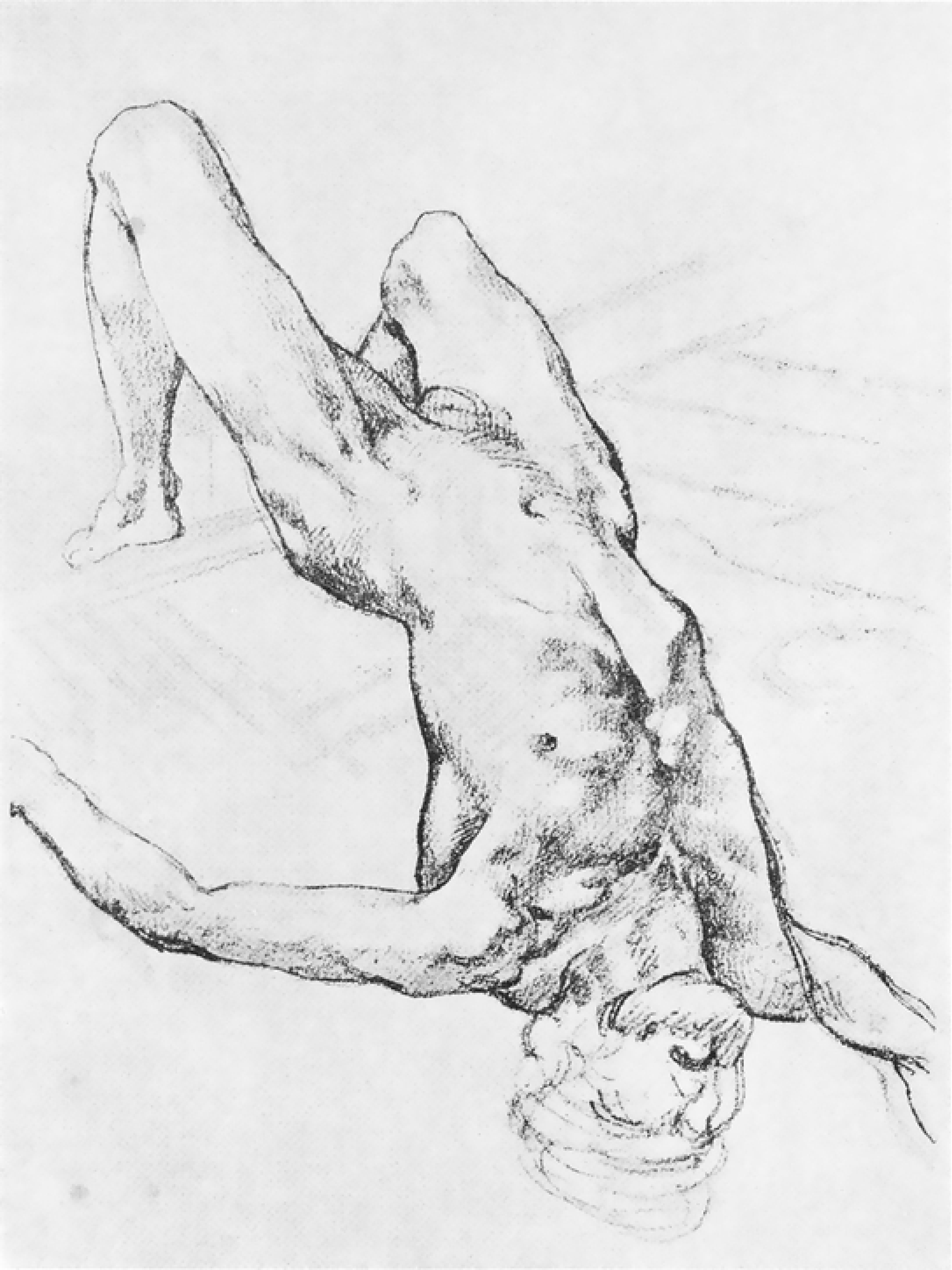
DEGAS



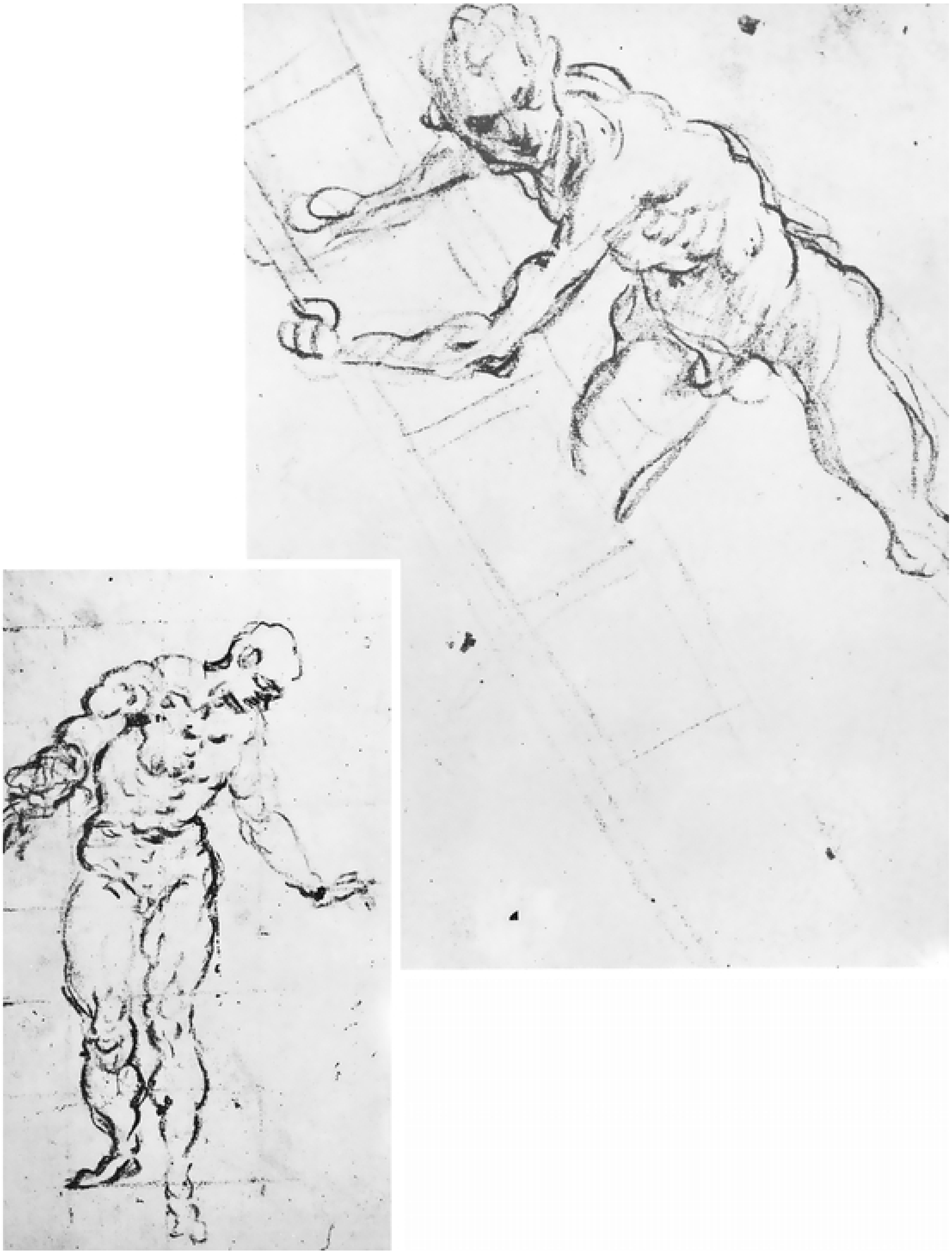
PASCIN



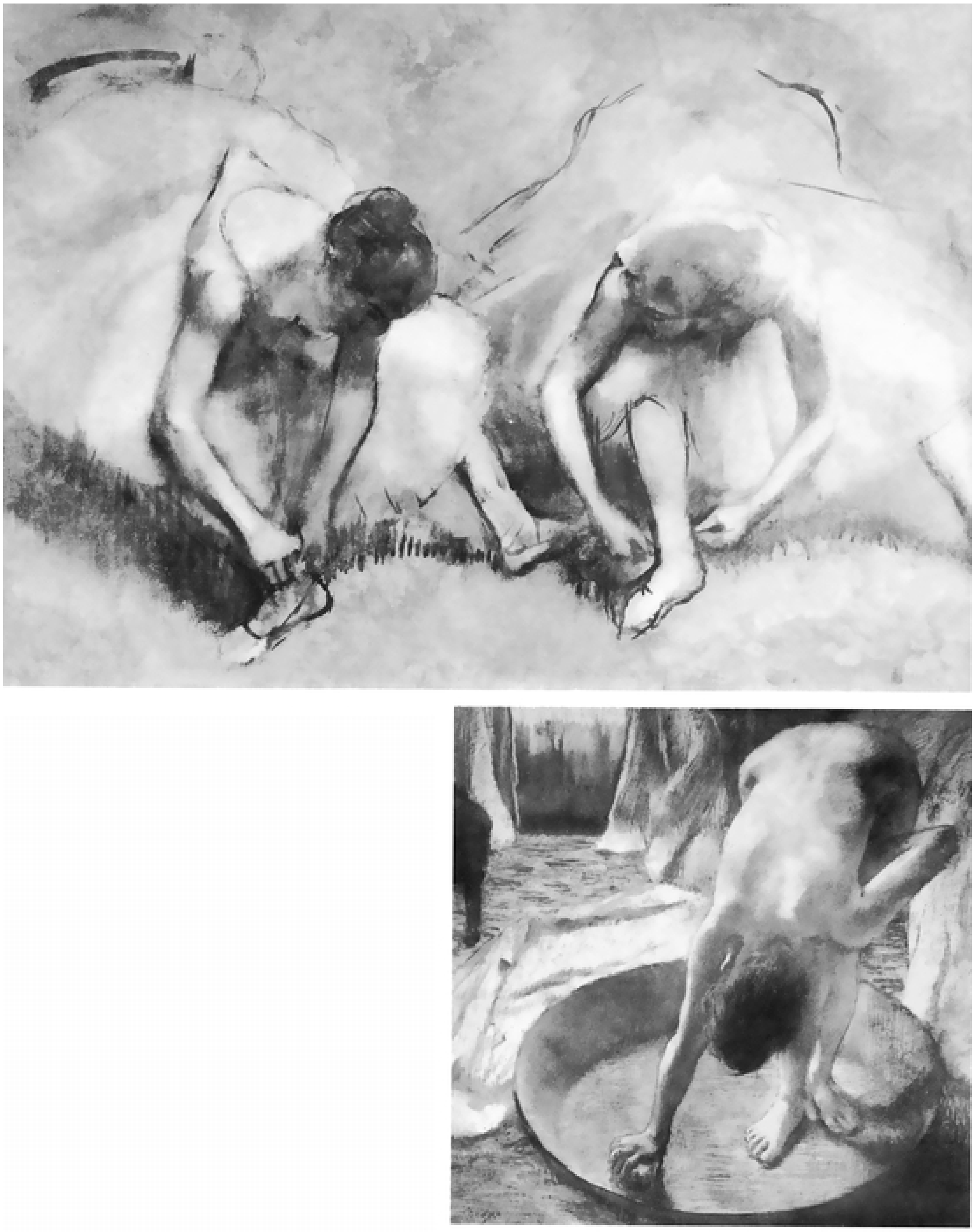
CORBINO



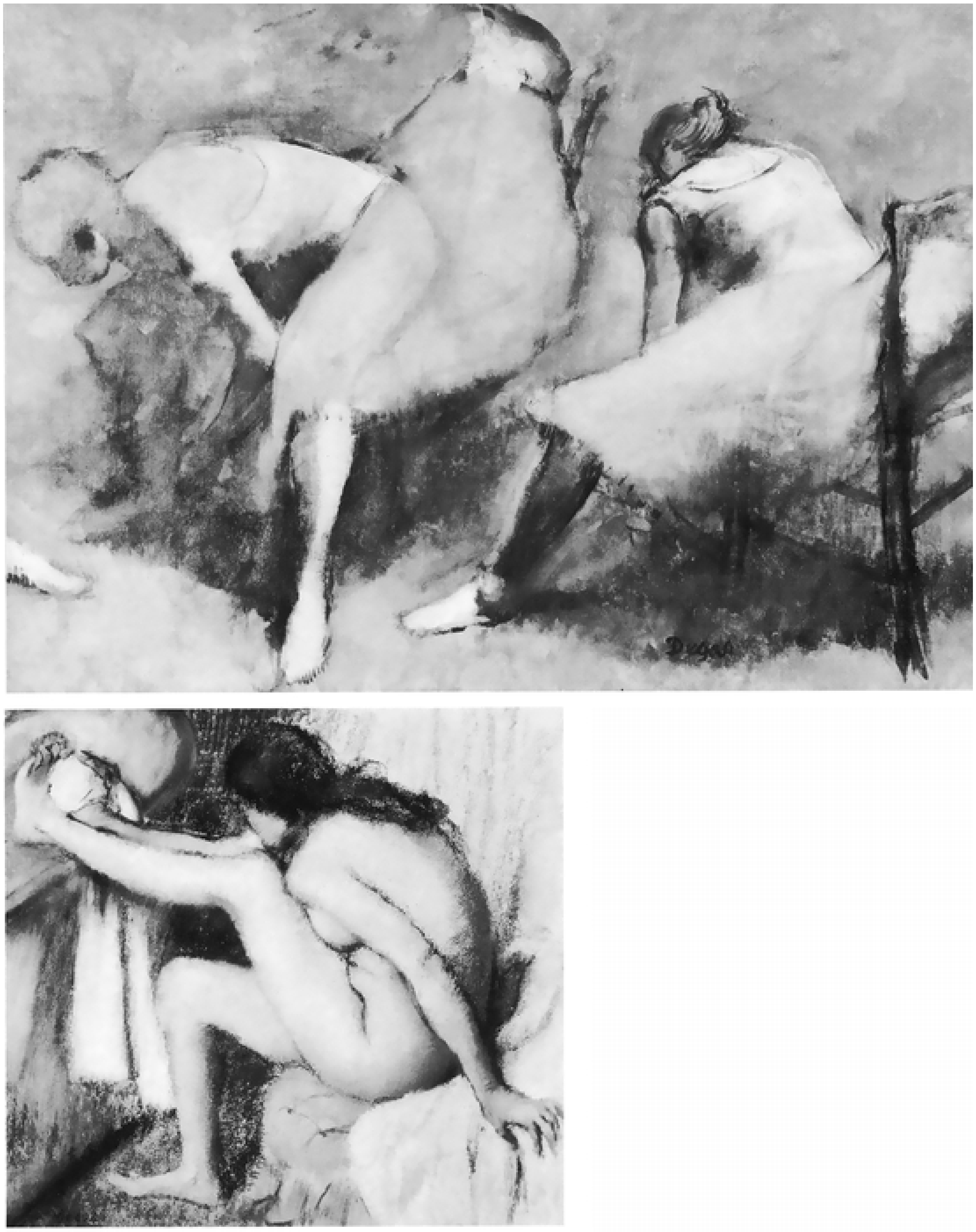
GÉRICAULT



TINTORETTO. Violent action is typical of many Italian drawings of the late Renaissance, to which period belong the sketches of Tintoretto. This tendency is important because a method of indicating action was developed *at that time. A rapid, nervous quality is a characteristic of many drawings done during that period.*



DEGAS



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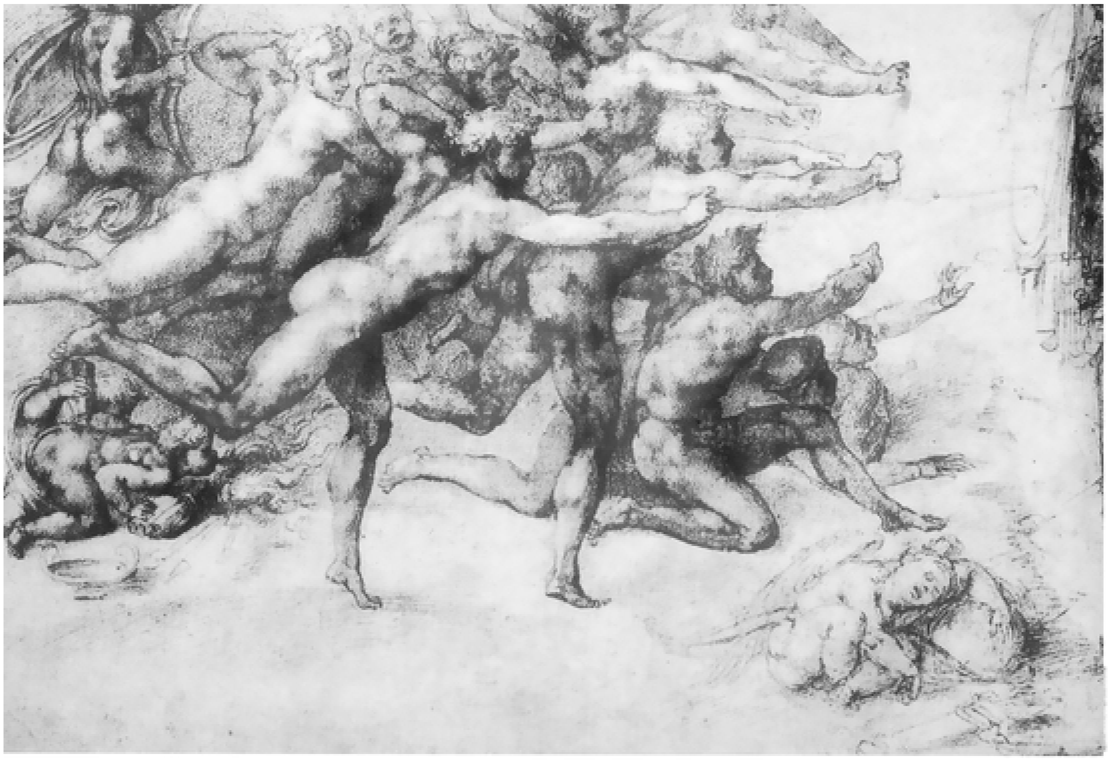
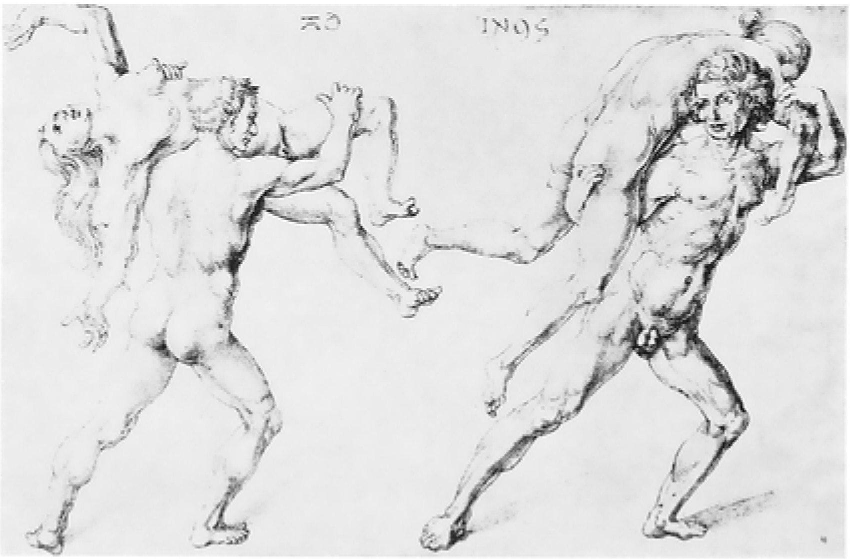
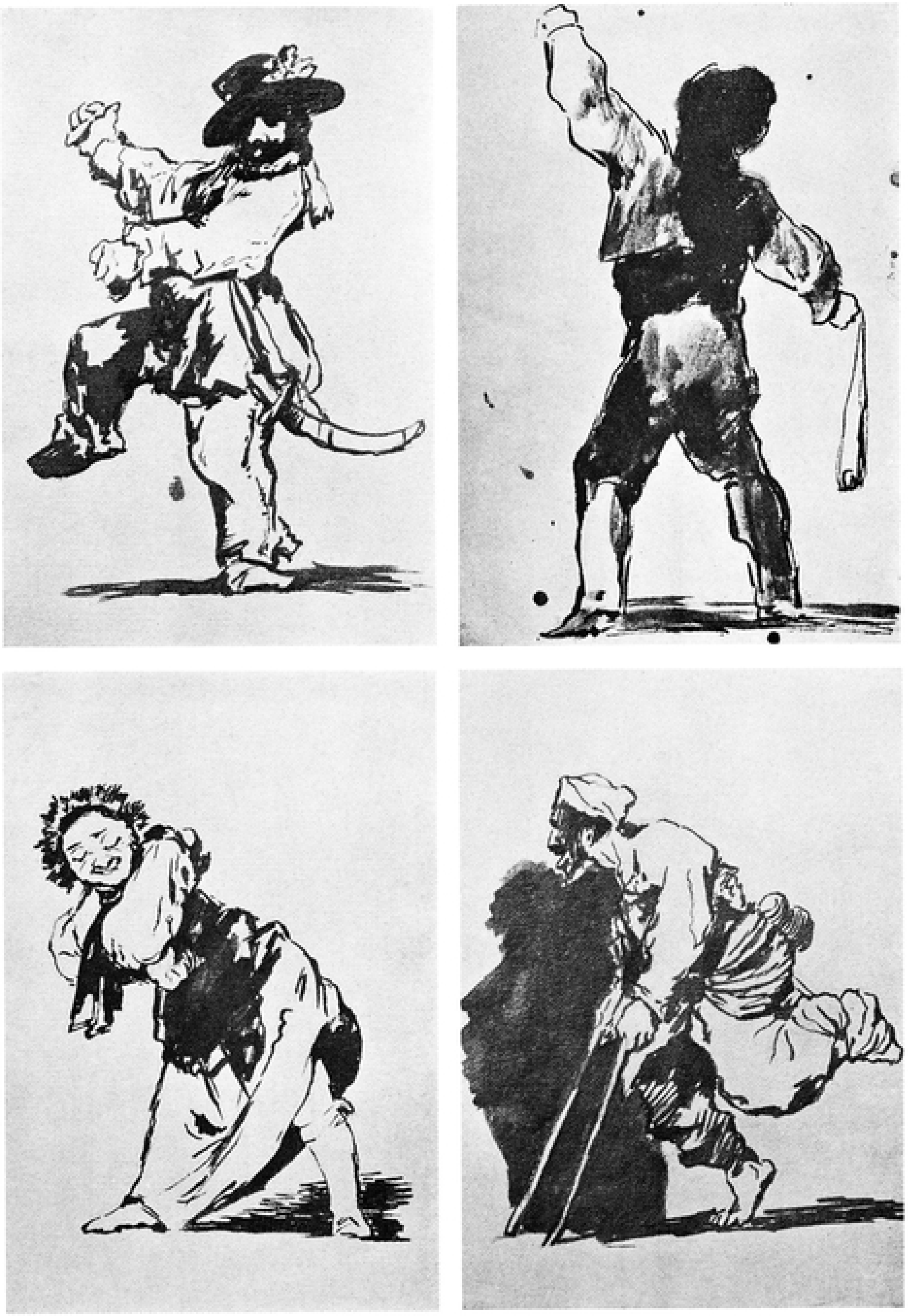


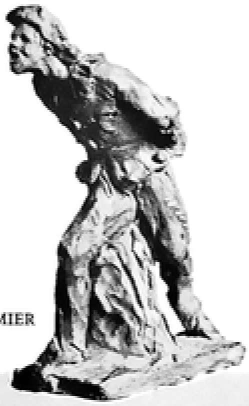
MICHELANGELO. The movement of the group of figures is not realized primarily through each individual figure in motion, but rather through the group moving as a mass. This concept is best realized when an artist works on the group as a whole rather than upon one figure at a time.



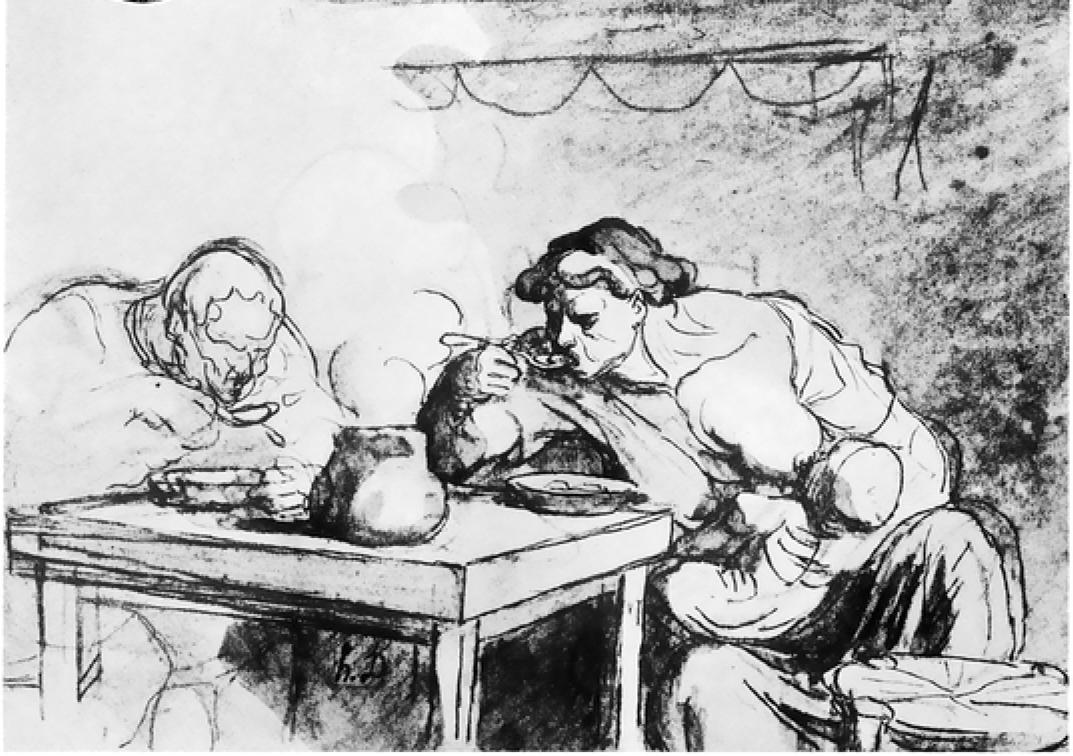
DURER, after Pollaiuolo



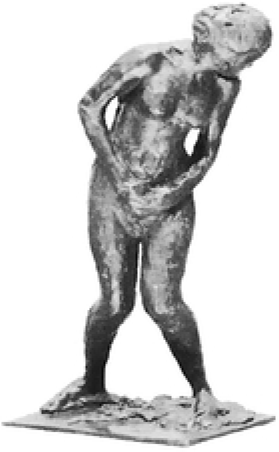
GOYA. Quick wash drawings by Goya, who made hundreds in this manner.



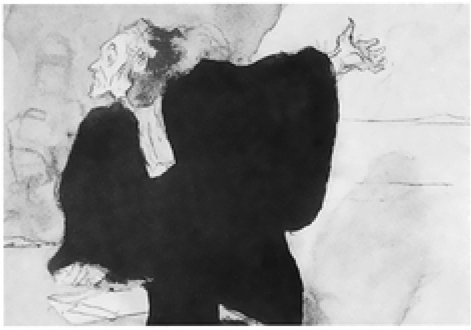
DAUMIER

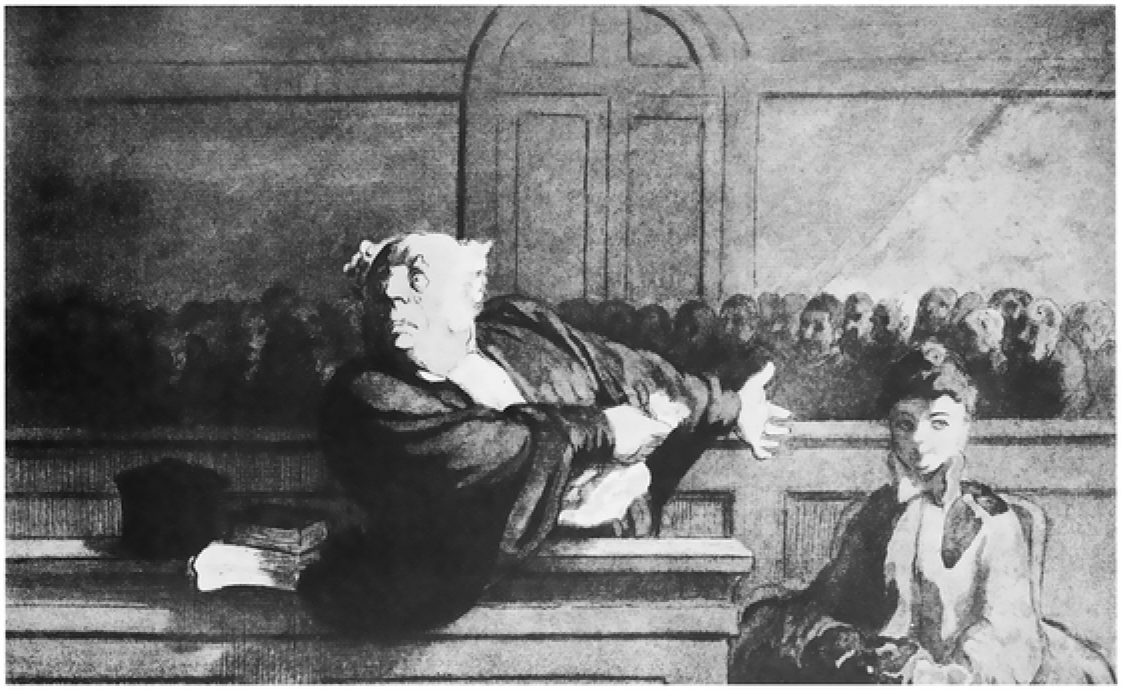


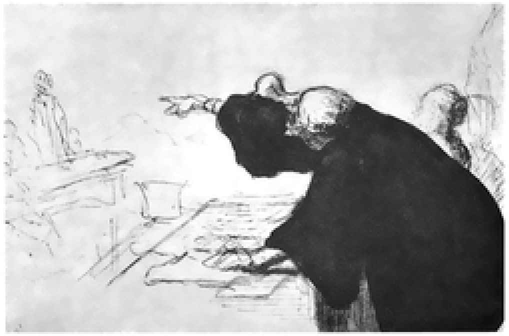
DAUMIER. *Artists such as Degas and Daumier, who were interested in action, often took to modeling in clay. Their figures were usually small and nervous in quality, strongly reminiscent of their graphic work. Like their drawings, these figures evince a sense of motion, a sense of arrested movement. Most of them were probably three-dimensional studies made to aid the artists in their study of form and what happens to it when seen from more than one angle. El Greco is said to have used wax figures as models for his paintings*.



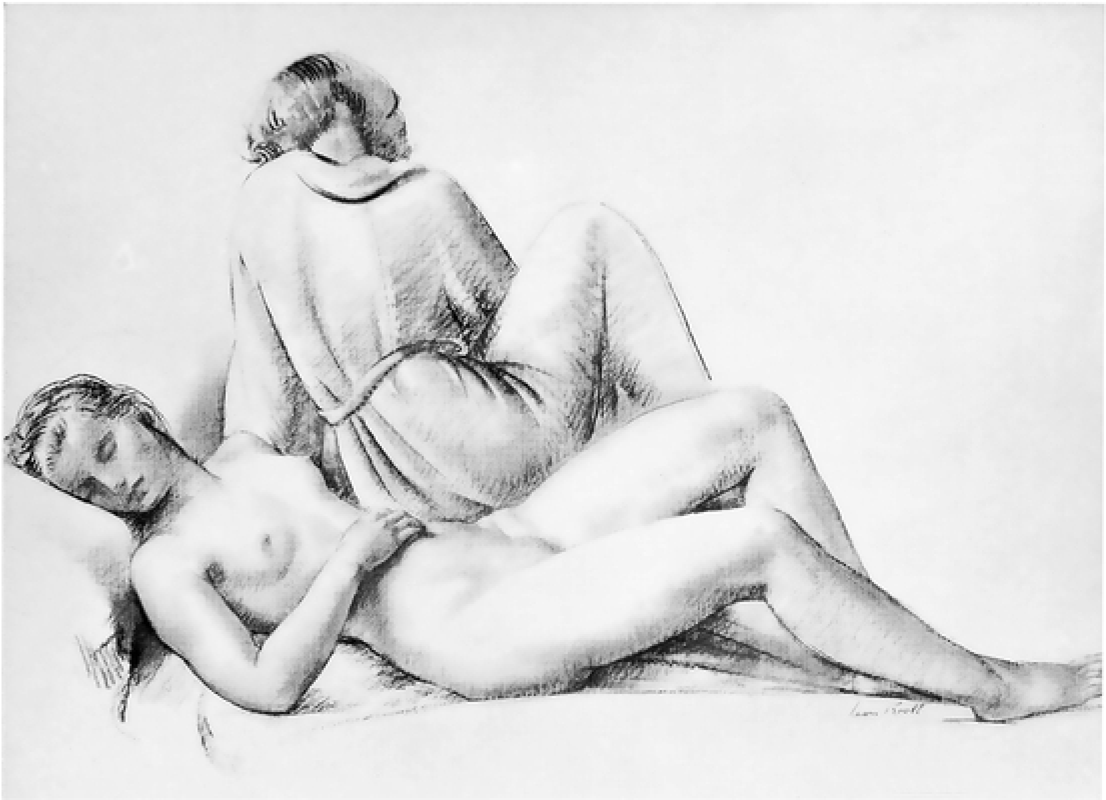
DEGAS



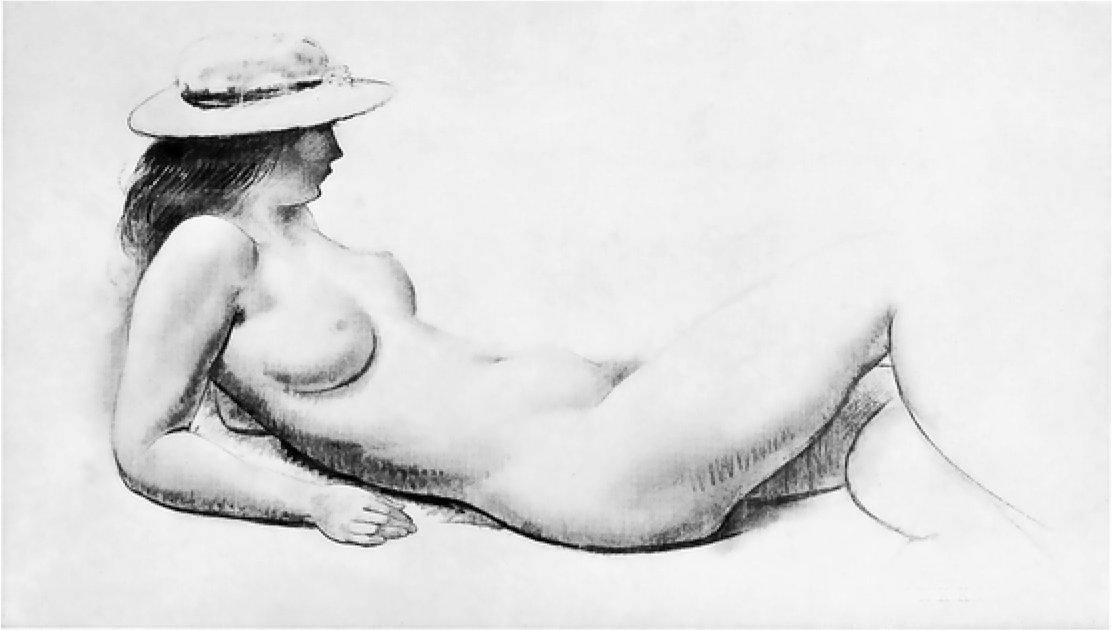




DAUMIER



KROLL



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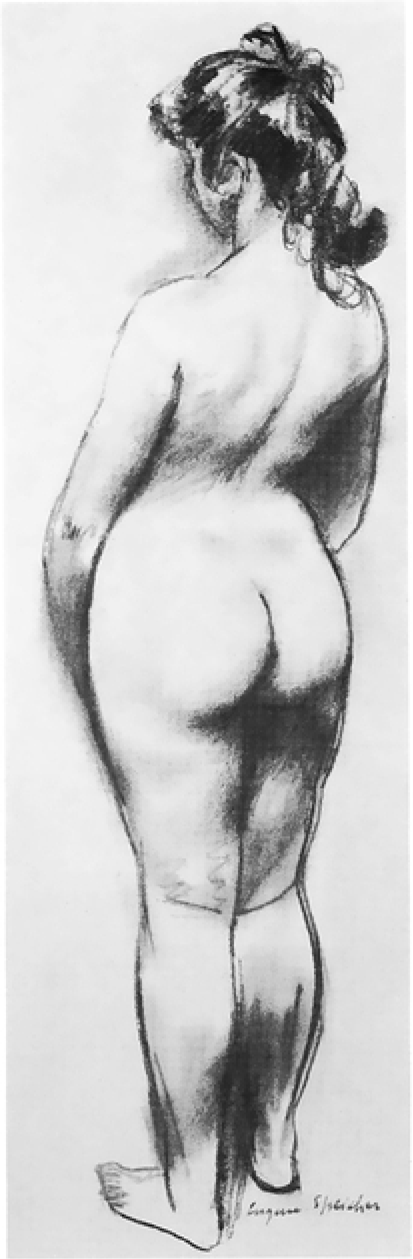
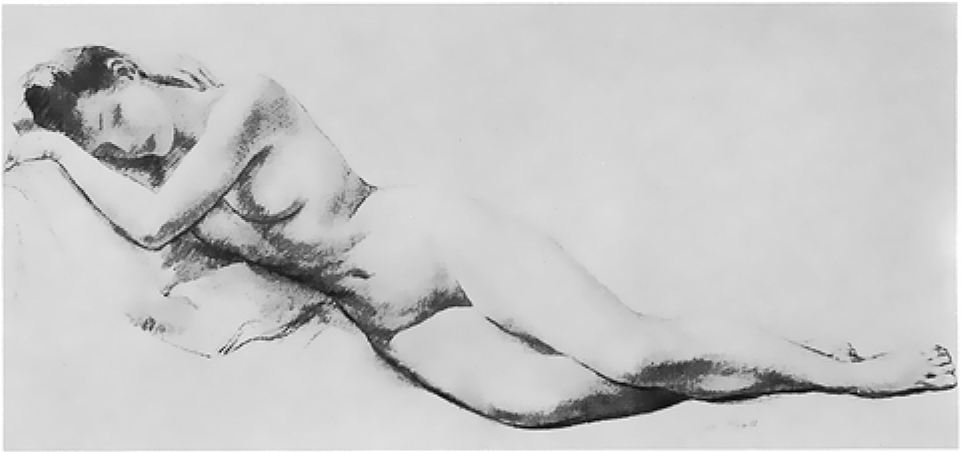
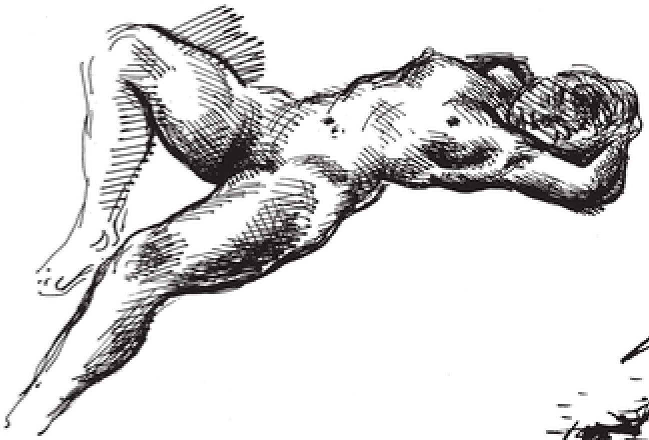


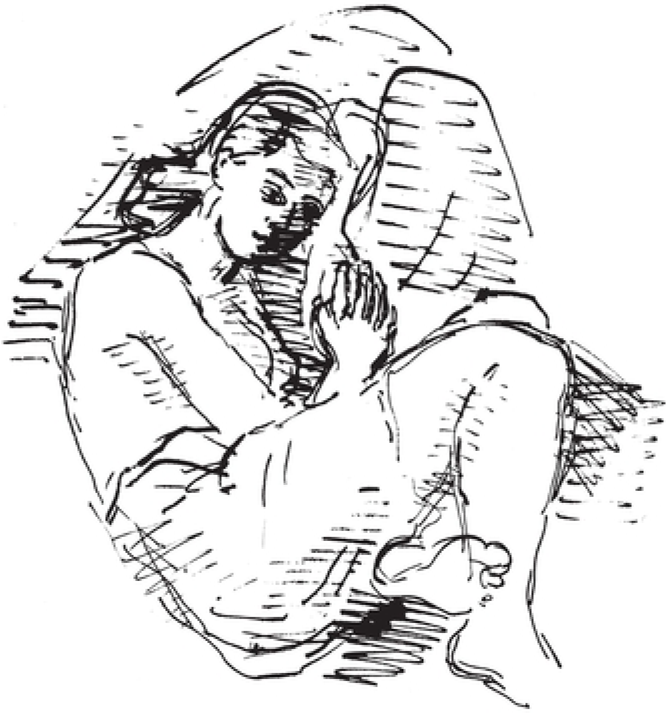
SPEICHER. In drawing a figure, complete absence of action is inconceivable to the artist. Absolute immobility belongs to inert matter such as a piece of wood or a stone. Even at rest a person is bound to strike a pose. A twist of the limb or the torso at rest is indicative of action.

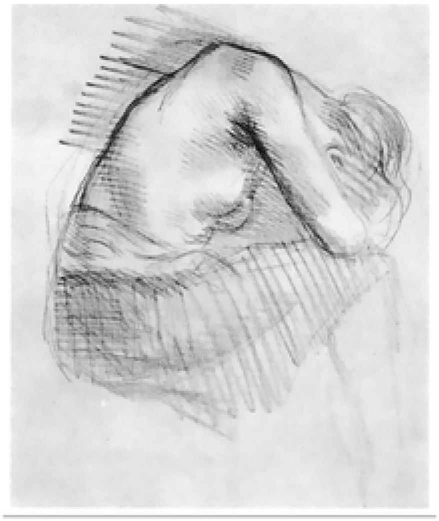
Indication of rest to an artist is a question of degree of action. A sense of comfort and stability is what an artist should attempt to impart to a figure at rest. Its weight must be well supported. A sense of security, and ability to *maintain a position for a comparatively long period of time should be the main characteristic of a body resting.*

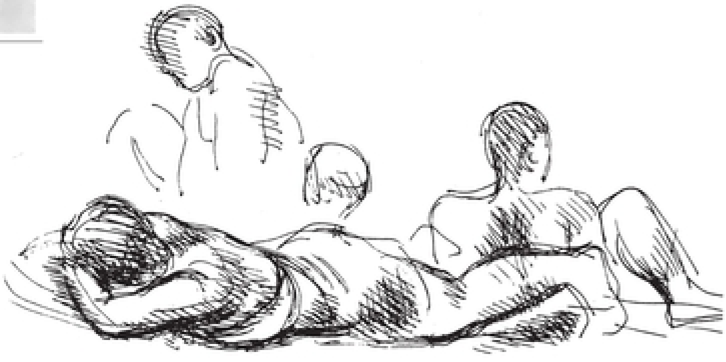
KROLL



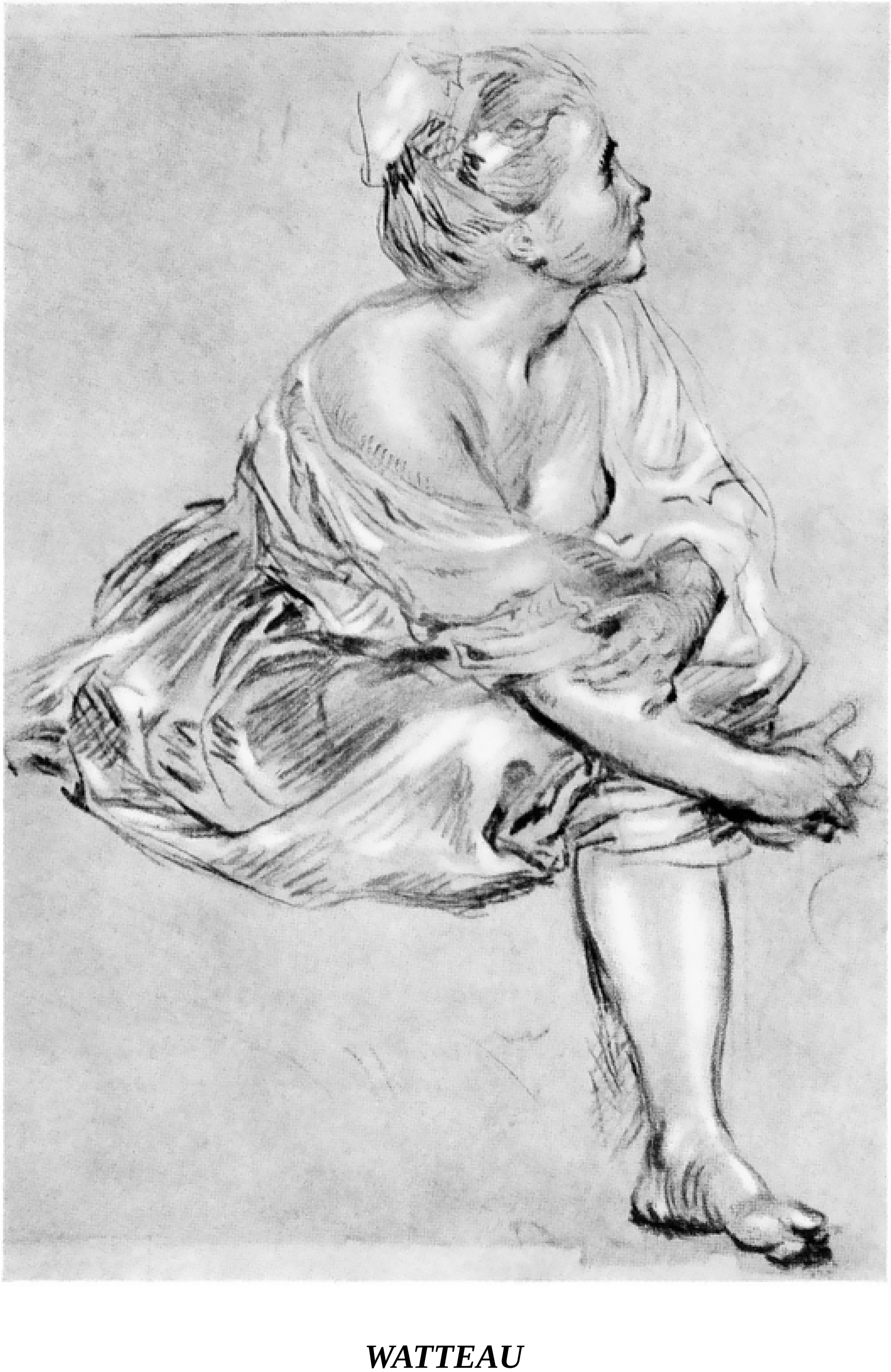




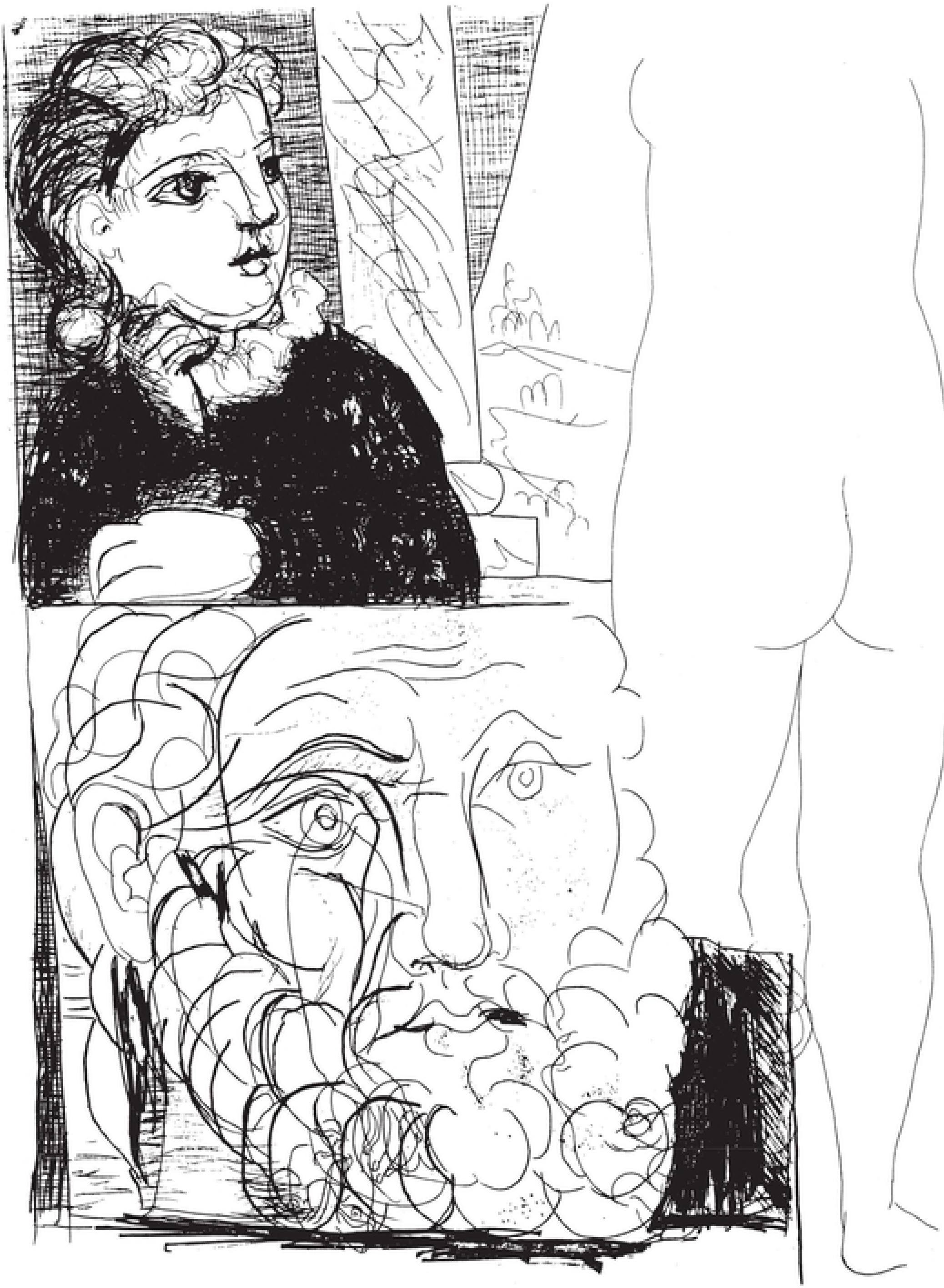




MOSES SOYER

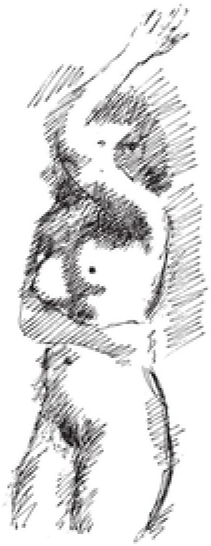


WATTEAU



PICASSO

Methods OF DRAWING



DOBKIN

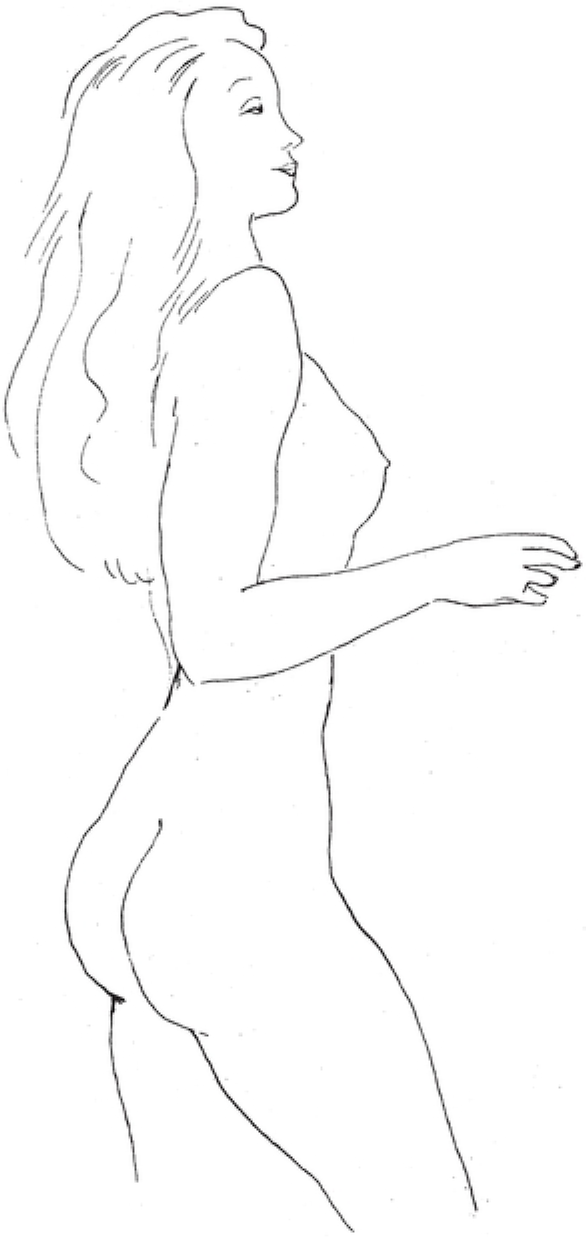
LEARNING to draw by a method imposed by a teacher can be very paralyzing to one's creative impulses. Surprisingly enough, "your own way" may be the best way for you. Instead of insisting upon drawing the way you were taught, why not examine several methods? Try them, experience them, and learn, by doing, the ways which you like best.

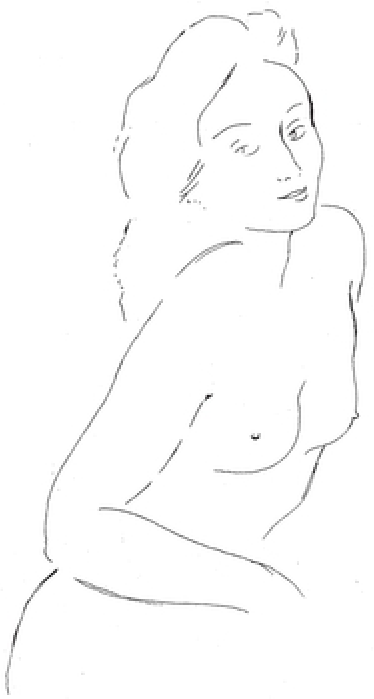
No good artist abandons all other means of expression after having discovered one particular method that suits him best. He will use different ways of stating his ideas at different times, and occasionally he will even use several methods within one picture. The reason is obvious: A line, for example, will have a different emotional appeal than a solid gray or black area. Artists never stop experimenting, not only because they are in constant search of a better way to say what they mean, but also because they find pleasure and excitement in expressing themselves in many different ways.

Here, briefly, is what various methods of drawing aim to accomplish:

1. *Contour drawing* consists of a line that outlines a form. In this way it isolates the areas and volumes from the rest of the space. Every part of the drawing is linear, and it is hardly ever shaded. This is perhaps the fastest way of working. Unless it is done spontaneously, rapidly, and directly, there is really no point in resorting to contour drawing, for here it is the beauty of the line that counts. It should be allowed to develop rapidly and naturally from a sharp tool such as a pencil or pen. Never fuss, erase, or re-do. If the drawing is unsatisfactory, try the same subject again. The beauty of this technique lies in its spontaneity. All original lines and corrections should remain in the finished work. Artists who do this kind of drawing best observe their subject very closely and follow its contours almost mechanically, hardly looking at the pencil or paper. The finished drawing may be out of proportion and look queer to some people. Yet it will always have a certain freshness and intimacy.

2. *Rapid indication of form* involves a different kind of observation. Here the artist observes the main direction of a body and indicates it as completely as he can. He then goes back and finishes every part to his satisfaction, taking his time, for even if the model can no longer hold her pose or is no longer there, the main lines of her movement have already been indicated.



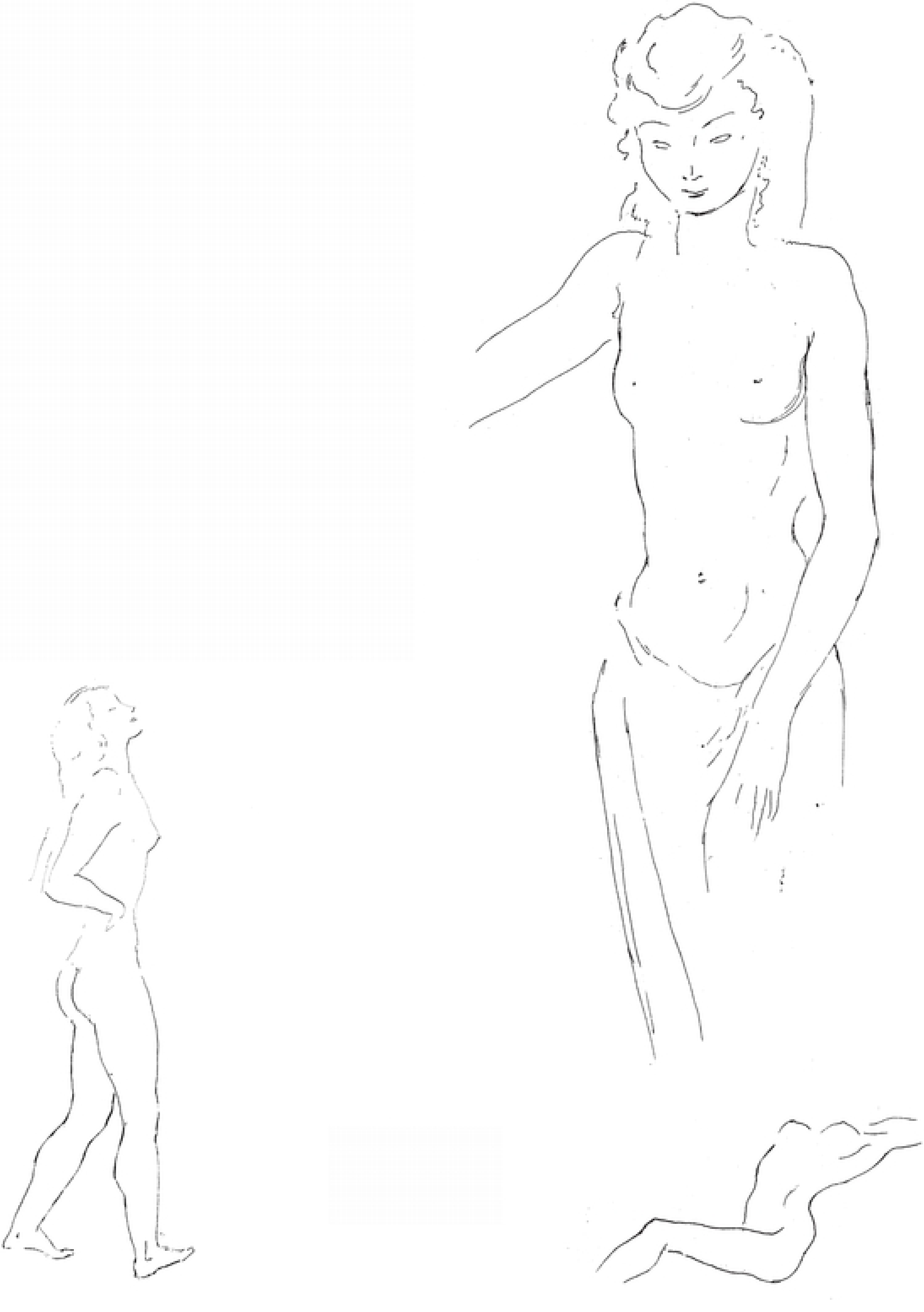


3. *Finishing one part at a time* is another way of drawing. The artist usually starts with the head when doing a figure. He finishes it completely, then goes to an arm, which is also completed before proceeding with

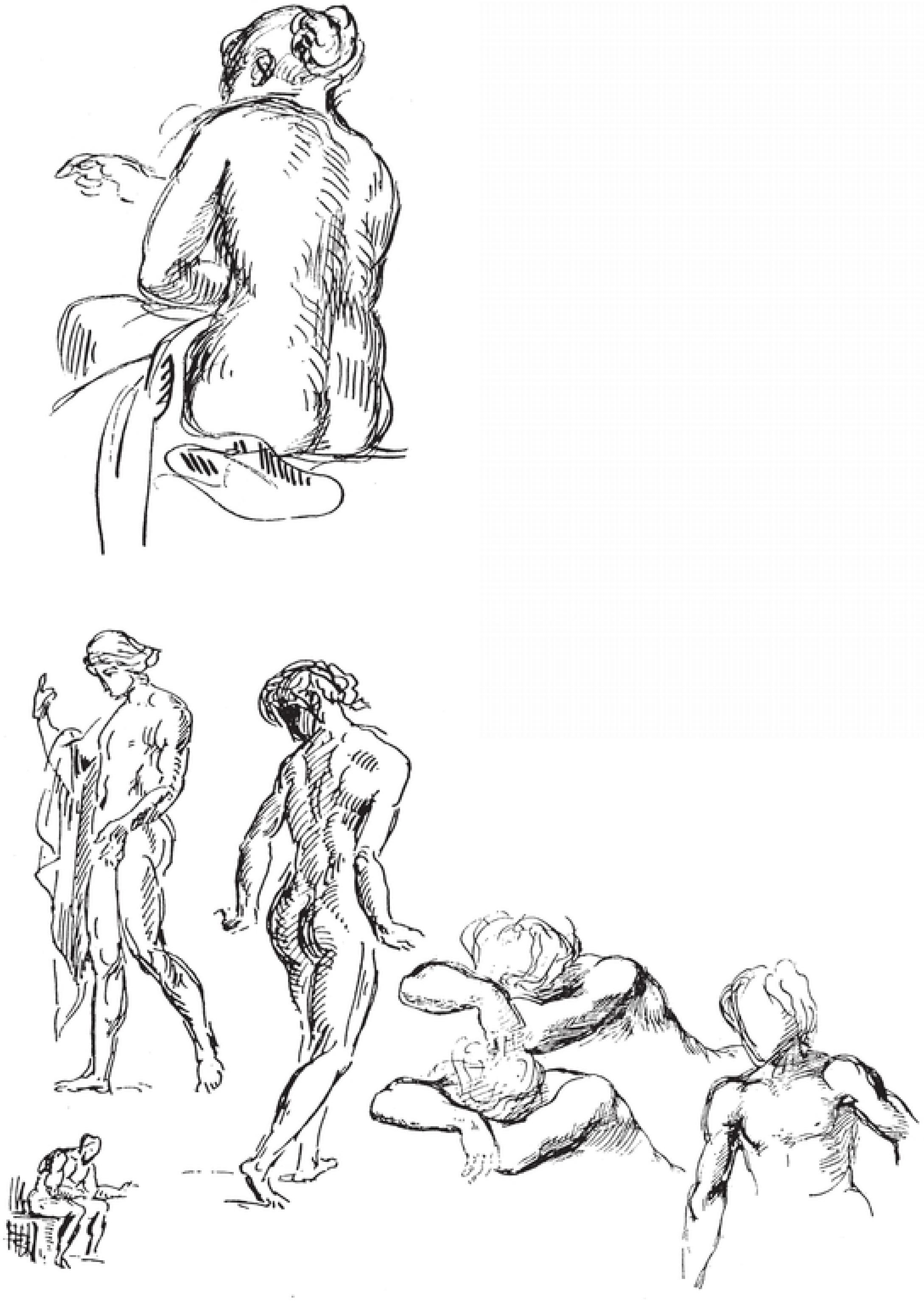
another part of the body. This may be the slowest method and is best suited when drawing directly from the model from start to finish. If everything is not indicated at one sitting, it is obvious that the model must return if the artist is to complete his work. Some artists feel it develops the habit of finishing completely what one has started and teaches the artist to be careful and observant.

4. *The trial and error method* enjoys the widest practice among artists. Its manner of expression is implied by the name I have given it. Here the artist never makes up his mind immediately about just what he wants to do. As he moves his pencil, he lets the lines themselves, their direction and movement, suggest what is to follow. The drawing glides along and is conditioned partly by the artist’s concept, which may be incompletely formulated, and partly by what he already has on paper. A twist of a torso may suggest a particular movement of the head, arms, or legs. One muscle may suggest another. A position of the body may suggest a story, etc. When drawing like this, one should not erase, but rather leave every line to inspire another. Thus an image or a figure is built up gradually.

Drawing freely this way makes an artist feel he is pouring himself little by little onto the paper. Often, the lines themselves will sug-gest an entirely different picture from the original conceived in one’s mind. And so this method becomes a way of drawing as well as an exciting and vital stimulus to creating new pictures. It may be the fastest means of drawing. Its worth lies primarily in the possibilities it opens up for inventiveness and experimentation. Also, it may be practiced best when applied to drawing without a model.

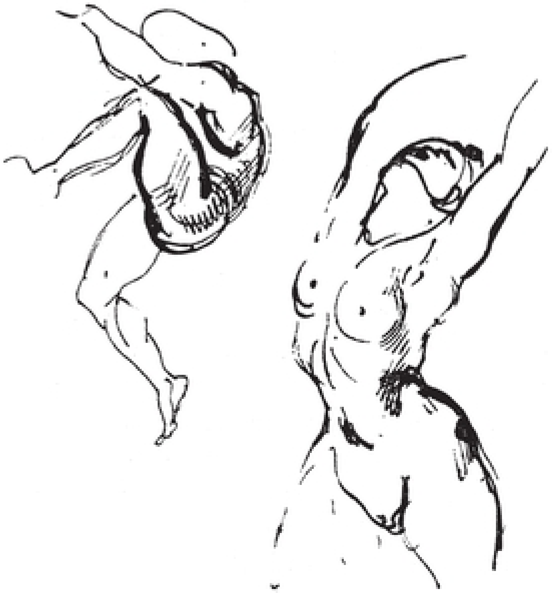


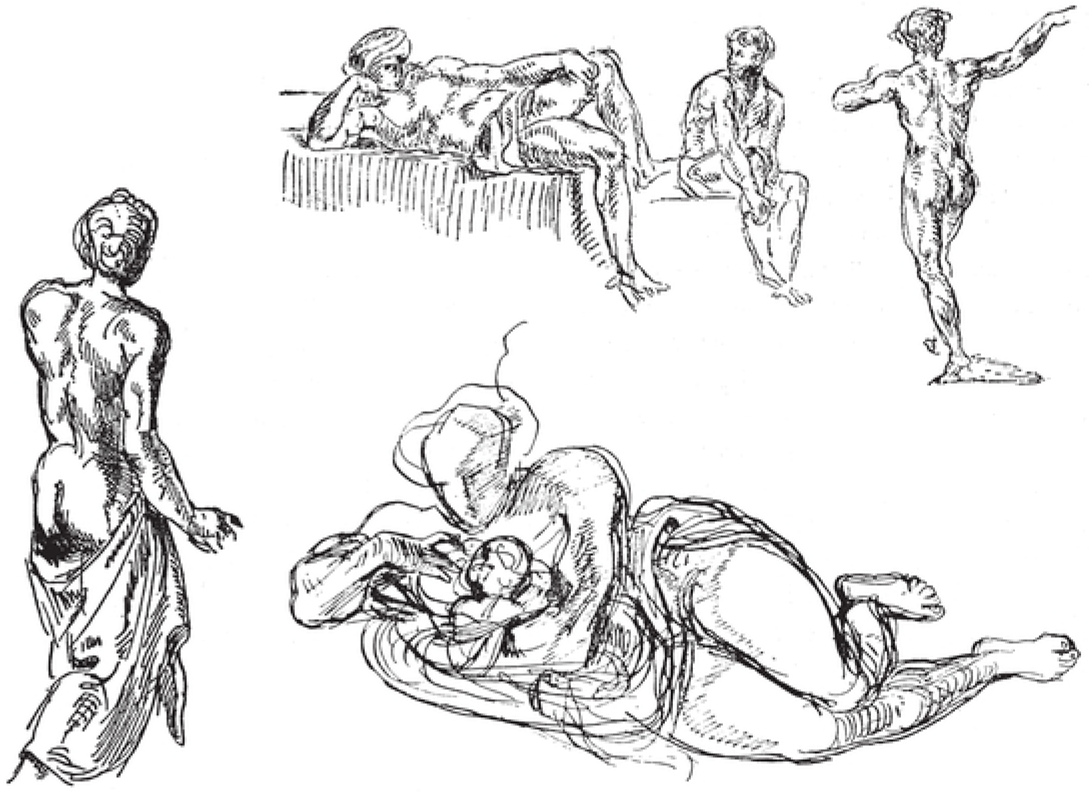
GIRARD



DELACROIX

At this point a few words can be added concerning the controversy about whether an artist should or should not use a model. Too great a dependence upon a model may lead to a stifling of the imagination. In more ambitious compositions, dependence upon the model may become a handicap. When figure compositions become complicated and design in space important, if one cannot take liberties and depend a good deal upon the imagination, the work will tend to lack scope and vigor.





On the other hand, the artist who refuses to look at reality will sooner or later begin to formalize, for no mind can invent as many variations as nature itself. In time his figures may lose vitality by becoming repetitive and too simple in structure. The answer to the problem lies in the historical fact that the greatest artists never fell into the habit of drawing always with or always without a model. They were generally masters of drawing with or without a posing figure before them. They had a great knowledge of life, they never stopped studying it, and were never lost with only a pencil and paper before them.

LIGHT AND SHADE AS PATTERN

There are three general ways of indicating form: (1) line or contour drawing; (2) darkening or lightening an object uniformly; and (3) grading an object from light to dark.

The simplest and, at times, the most sophisticated is line or contour. A contour drawing of an object outlines the object and makes it recognizable. Therefore, before any other treatment of an object is attempted, it is advisable to make a simple line drawing of it.

Making an object darker or lighter than its background is another method of making it visible. Drawing gray or white against a black background, or vice versa, are some of the choices an artist must make. Such choices require care and thought, for the solution of the problem of relating the whites, grays, and blacks may well be the making of a picture. These patches of white, gray, and black should be so organized as to make a definite design; they should be planned. From a short distance they should appear to make a definite pattern. Therefore it is advisable to plan a picture with flat, ungraded areas before going on with the next step, called grading or shading.

By shading we mean that an area within an object no longer appears flat, that it seems graded, that one side of it is light and the other dark, and that the dark is achieved through a gradation of light to dark.

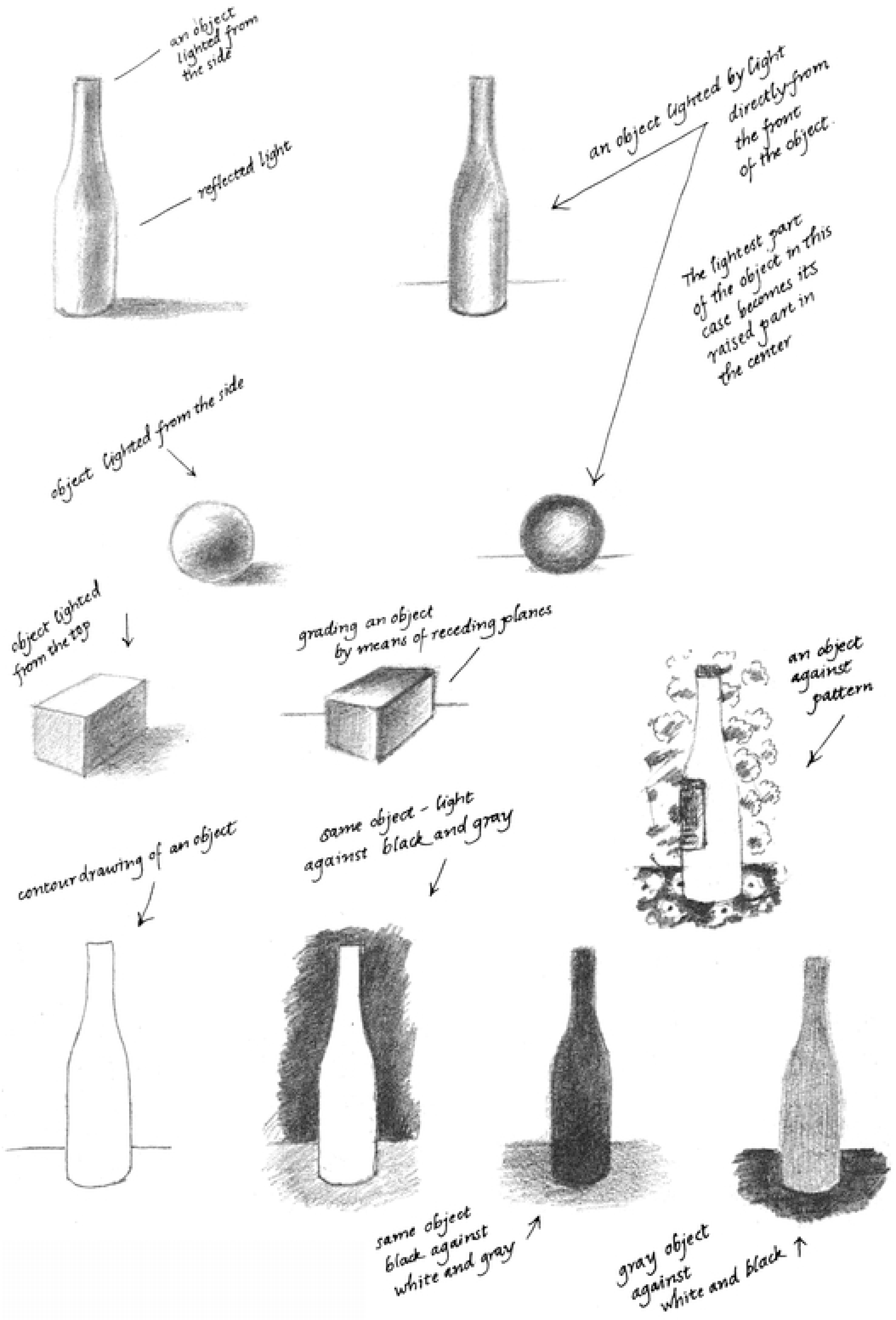
Objects in daylight always appear to be shaded. For example, a ball on a sidewalk lighted by daylight is not absolutely white on one side and absolutely black on the other. Its gradations are very subtle. Most likely it is quite light on the top, darker near the bottom, with the surface close to the sidewalk not quite so dark because the sidewalk itself reflects the sunlight. (See light and shade of breast in photograph, page 90. Also page 141.)

Shading is not used with the sole aim of representing things photographically. A more valid function is to show the difference between various shapes. For instance, a cube, when lighted, immediately acquires a rectangular shape quite different from that of a sphere. Hence light and shade are often used as a graphic language to explain different shapes and volumes. Although it may not be the only way, it is one method of creating the appearance of solidity and depth upon a flat surface such as paper or canvas.

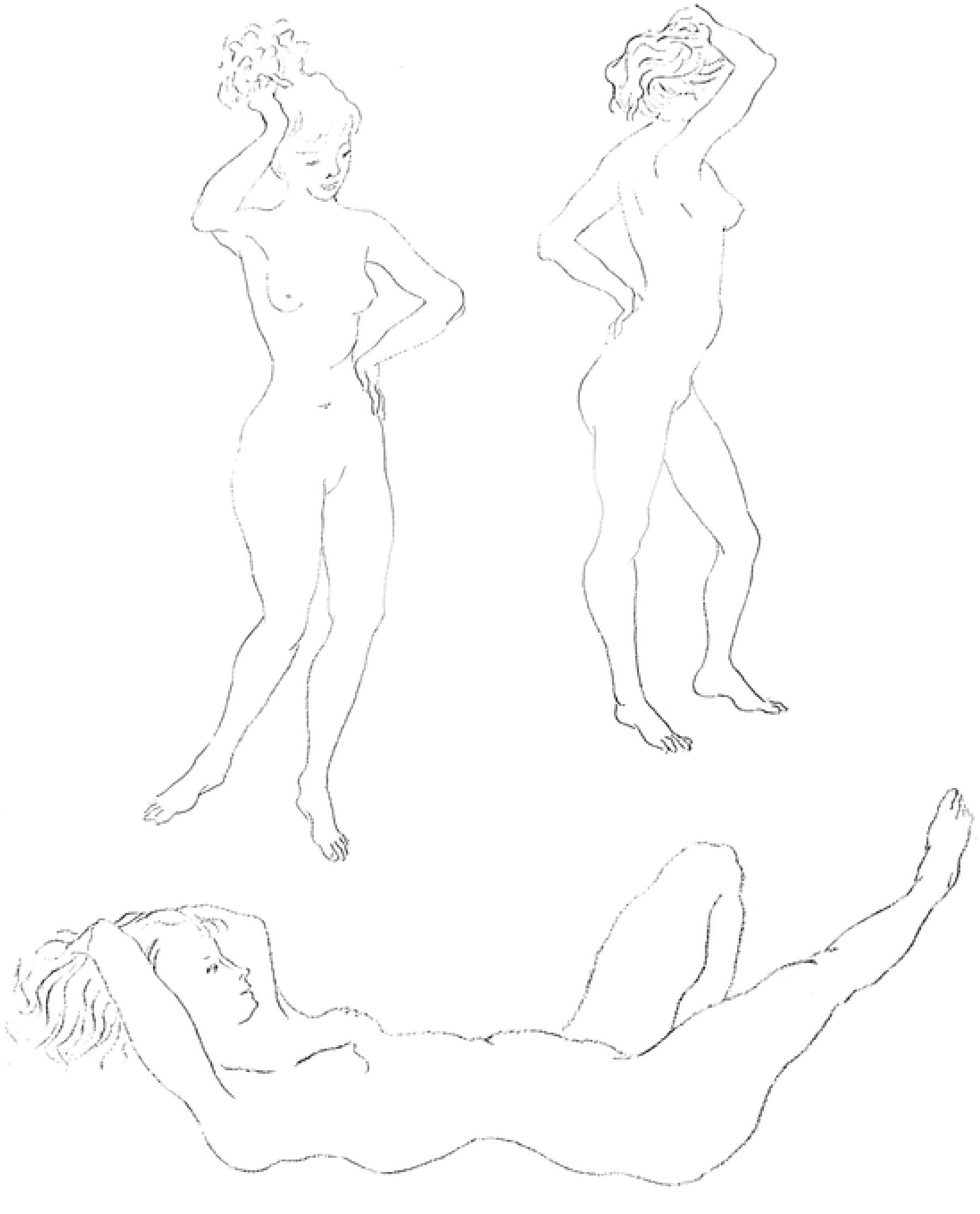
A common way of indicating a raised surface in shading is by making it lighter than the receding surface. The lightest part of a sphere seems to come forward toward the spectator while the darker parts recede, creating the illusion of a three-dimensional form. Practically all Renoir drawings and paintings are shaded so that the surface nearest to the spectator is lightest.

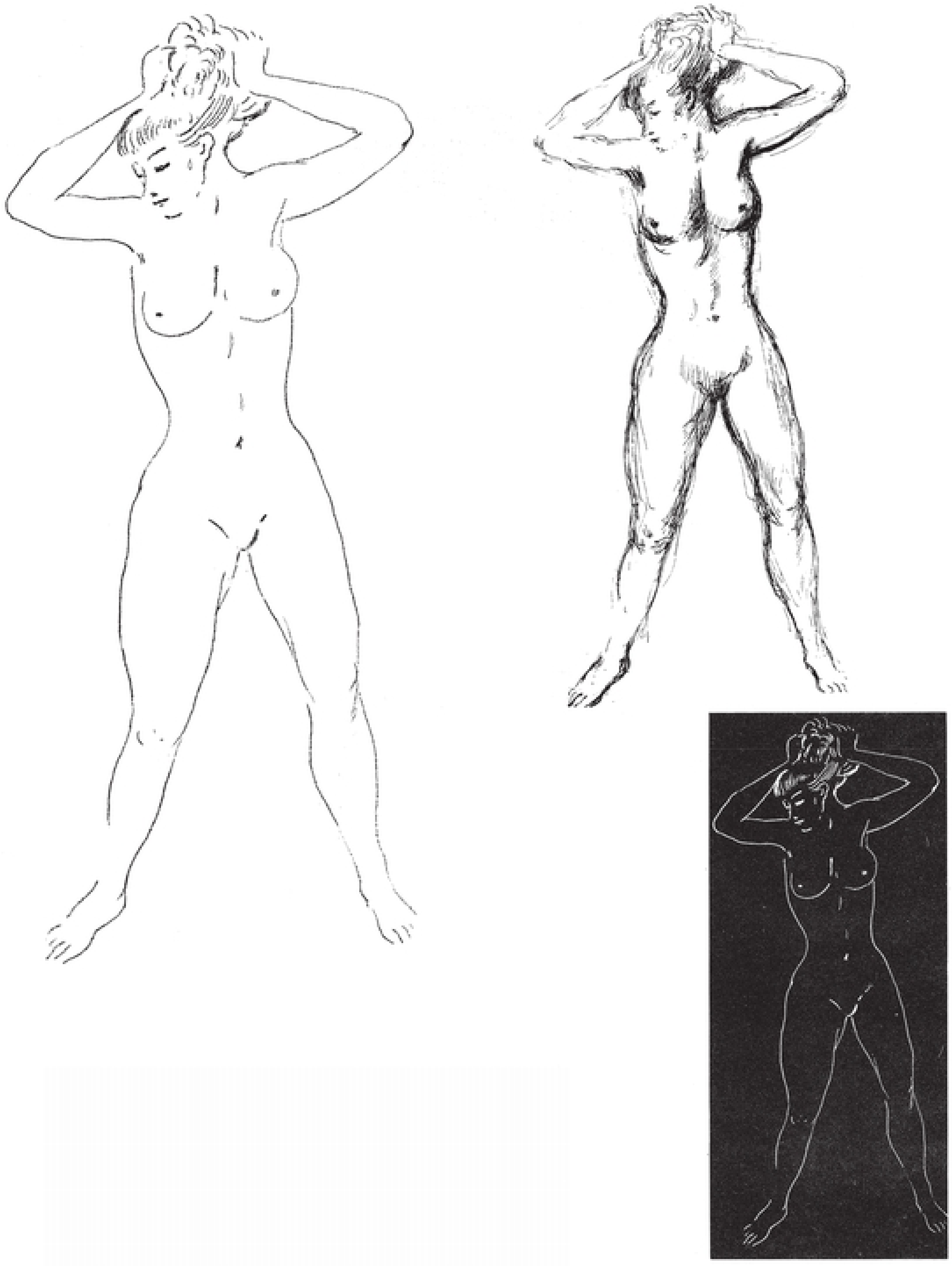
Sometimes an artist will use gray paper, making the gray of the paper itself his middle tone. That is one way of solving the problem of indicating form quickly and effectively. By using white chalk or paint he can establish his raised surfaces, and by employing ink or dark pencil he is able to make any other part of the drawing go back or recede. (See pp. 202-3.)

When an object is lighted from one side, the side thus lighted will be the lightest, and the form will cast a shadow on the other side.

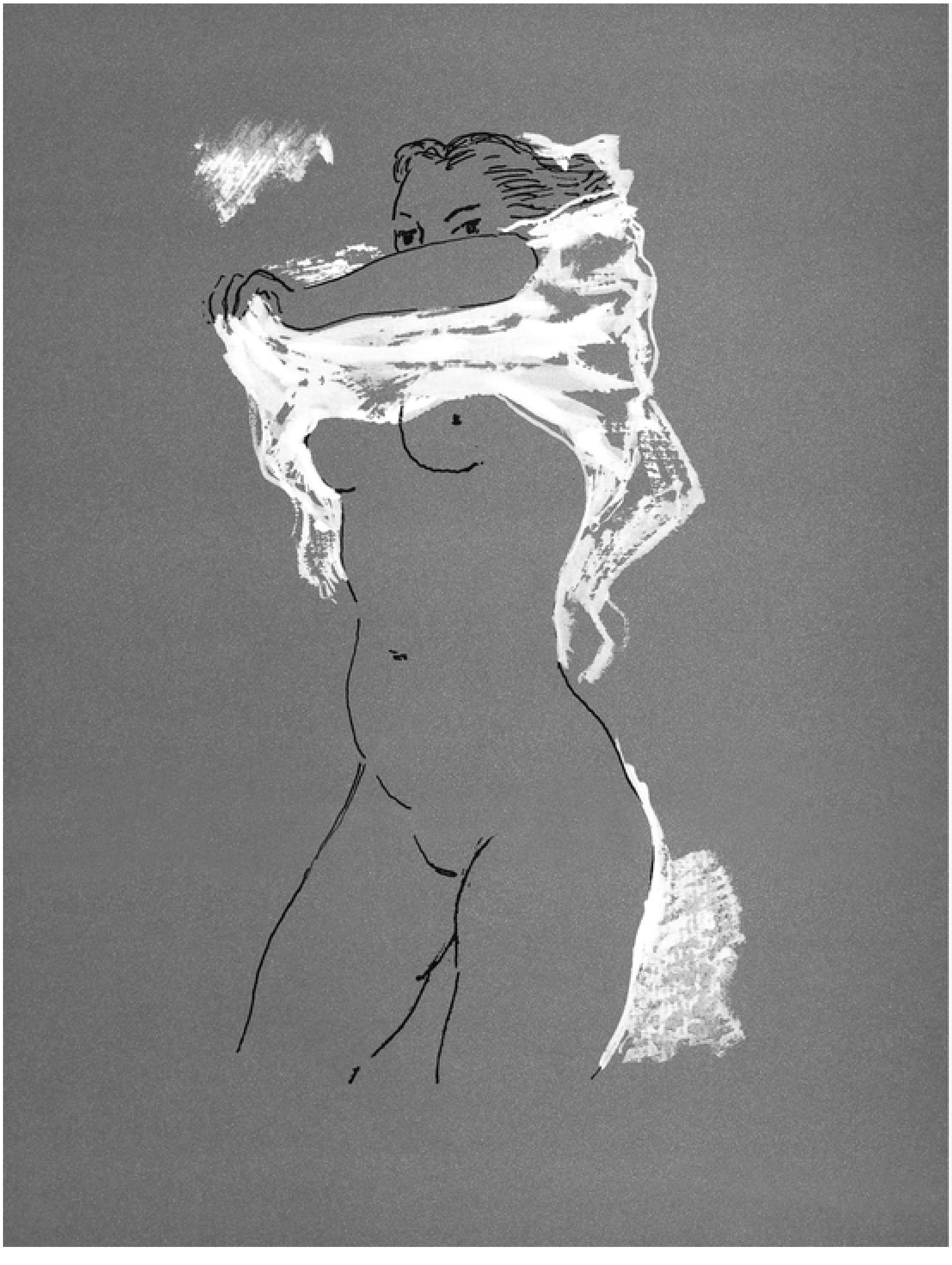

an object lighted from the side
reflected light
an object lighted by light directly from the front of the object.
The lightest part of the object in this case becomes its raised part in the center
object lighted from the side
object lighted from the top
grading an object by means of receding planes
an object against pattern
contour drawing of an object
same object - light against black and gray
same object black against white and gray
gray object against white and black

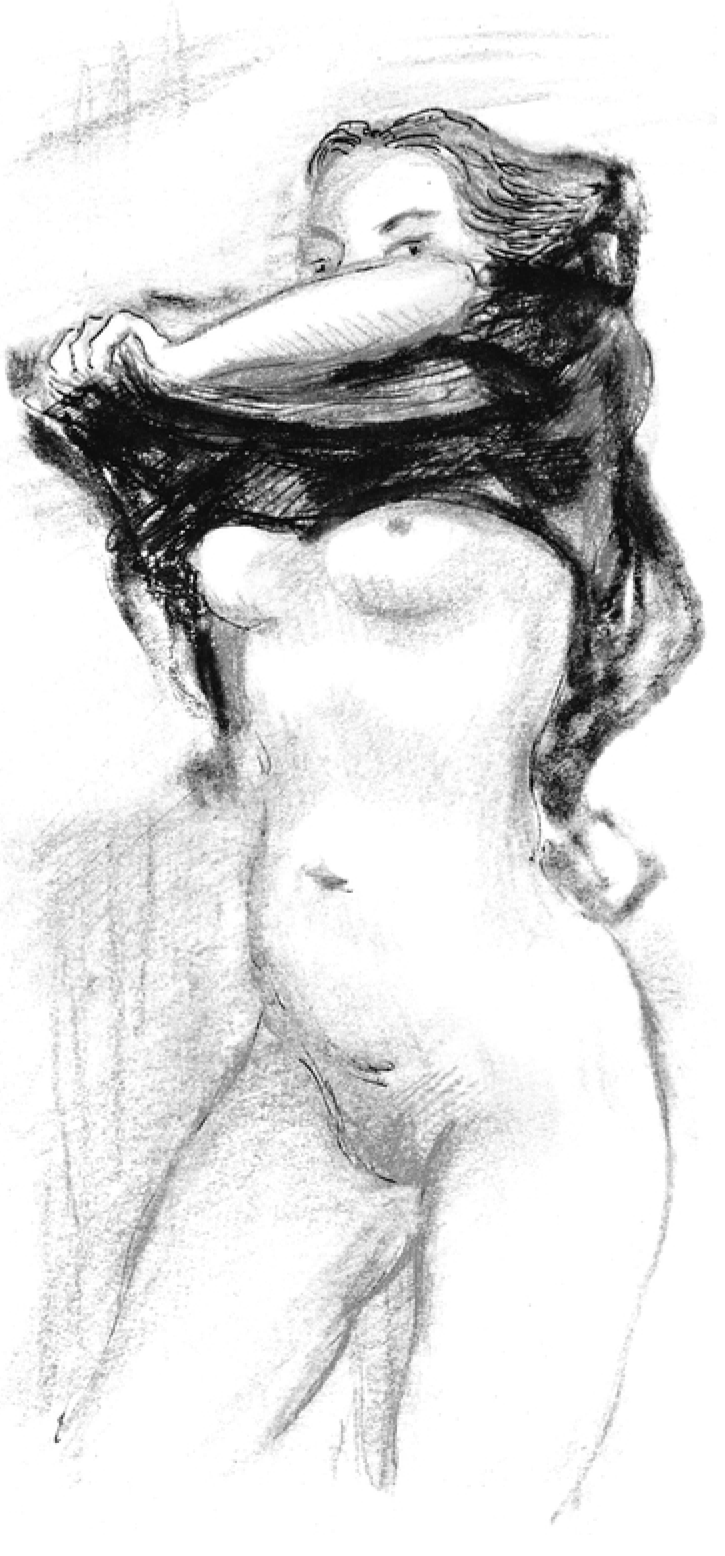
DOBKIN. Illustrations for light and shade



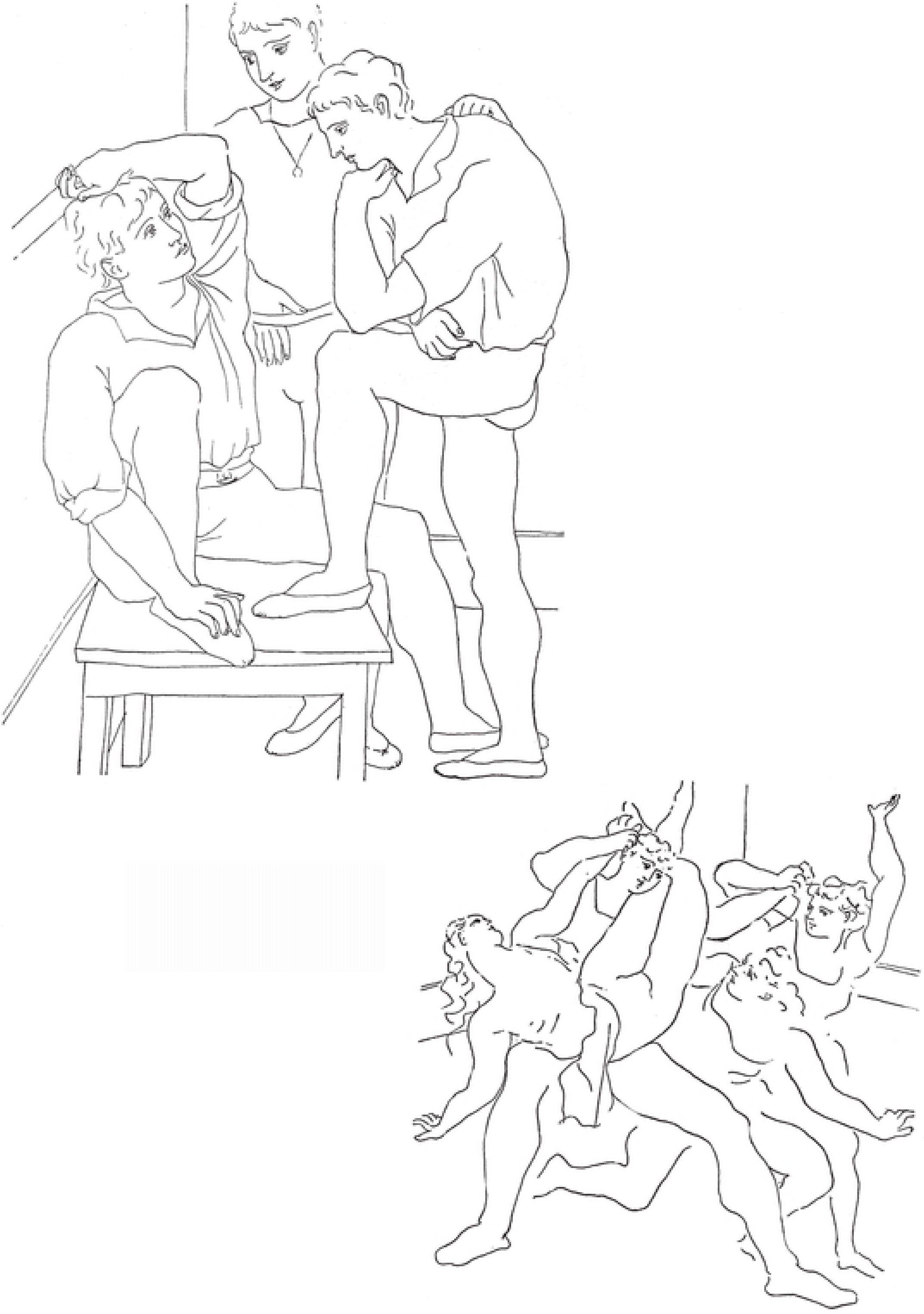


DOBKIN. Here the same figure is represented in three different ways: contour, trial and error method, and a white on black drawing which is a photostat negative.

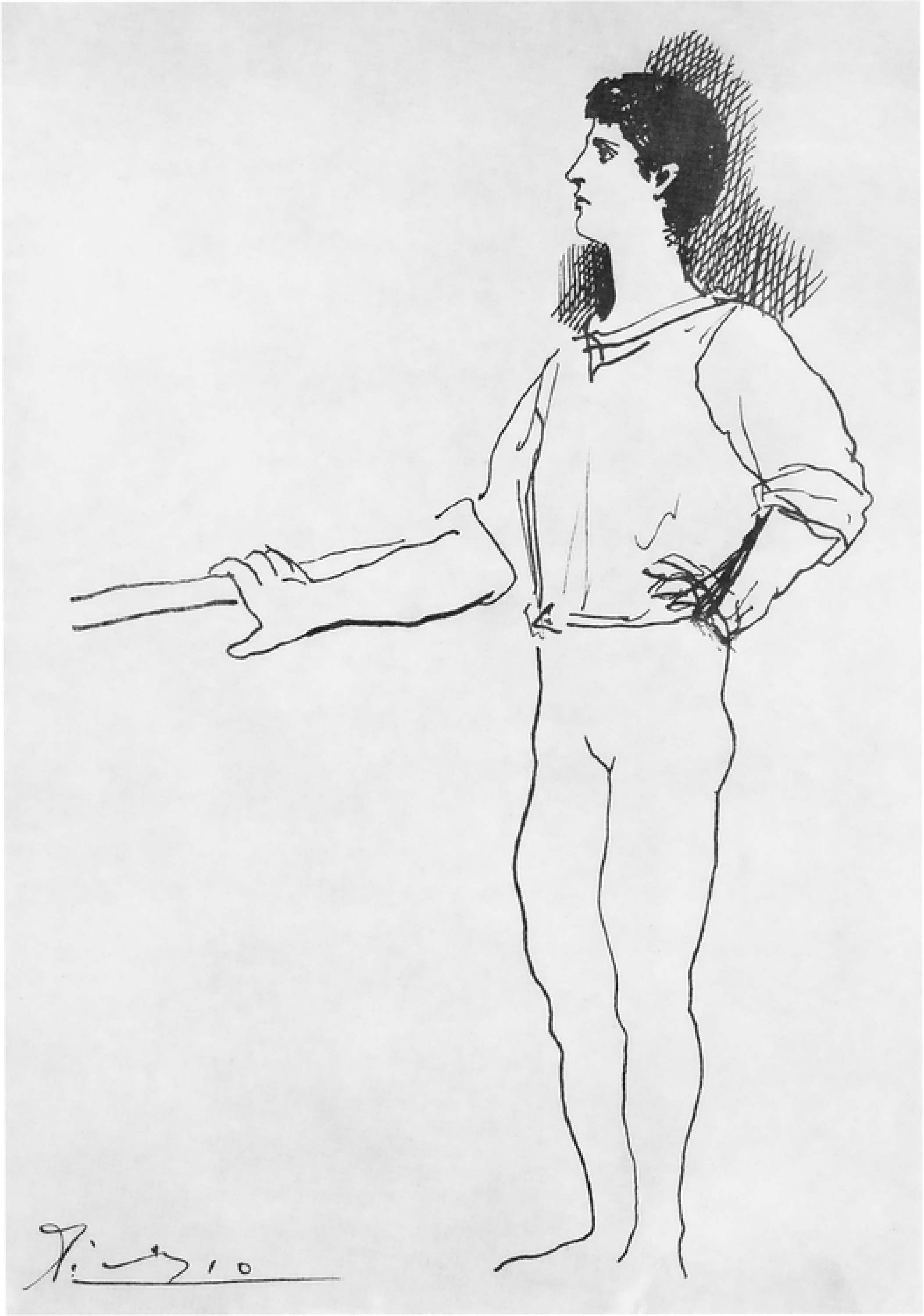




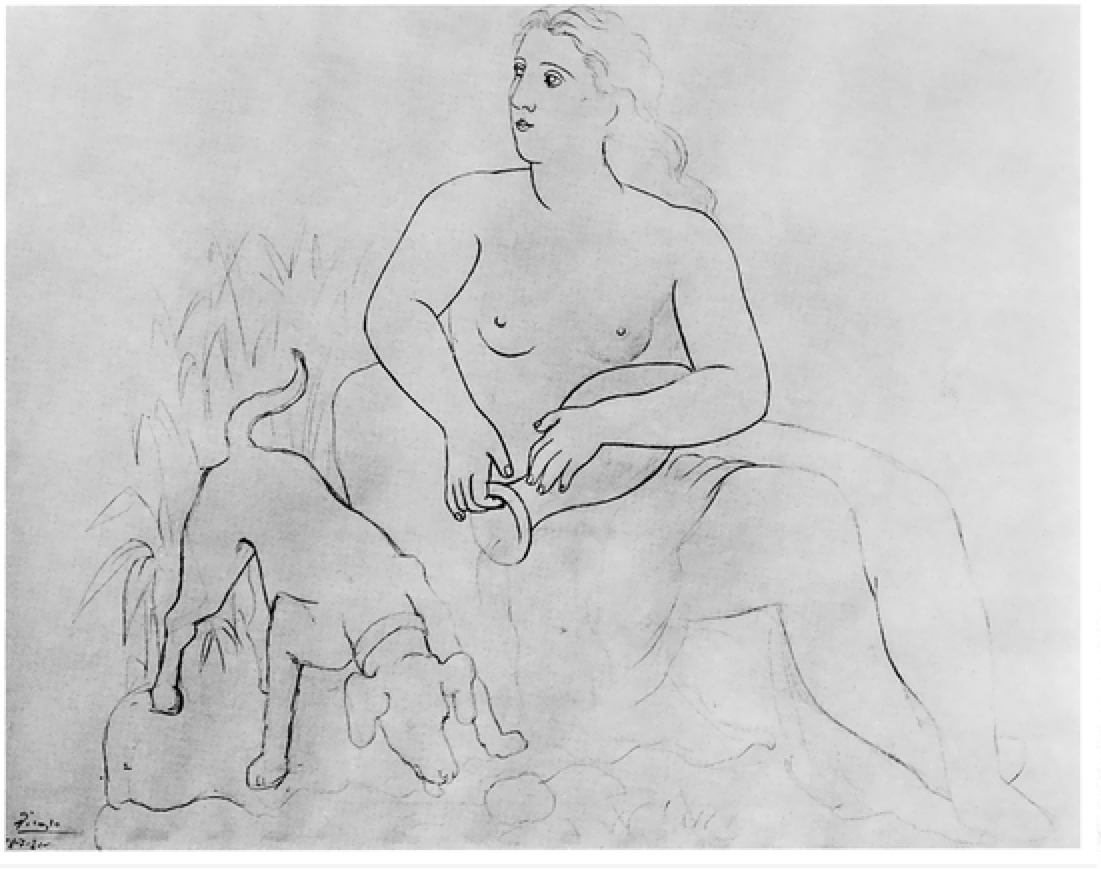
DOBKIN. Most of us think of drawing in terms of black lines on a white surface, yet many drawings have been done with color pencils on white or *colored paper. By using color pencils or colored paper, many different effects can be achieved. It makes it possible to strengthen parts of the drawing and soften others. On these pages I have attempted to illustrate how color can become an integral part of a drawing when a figure is built up or shaded, and how a pure black line and a little white paint can be used on an unshaded colored surface when doing a figure in contour.*

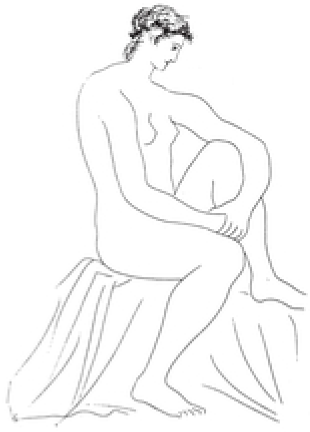


PICASSO. Contour drawings

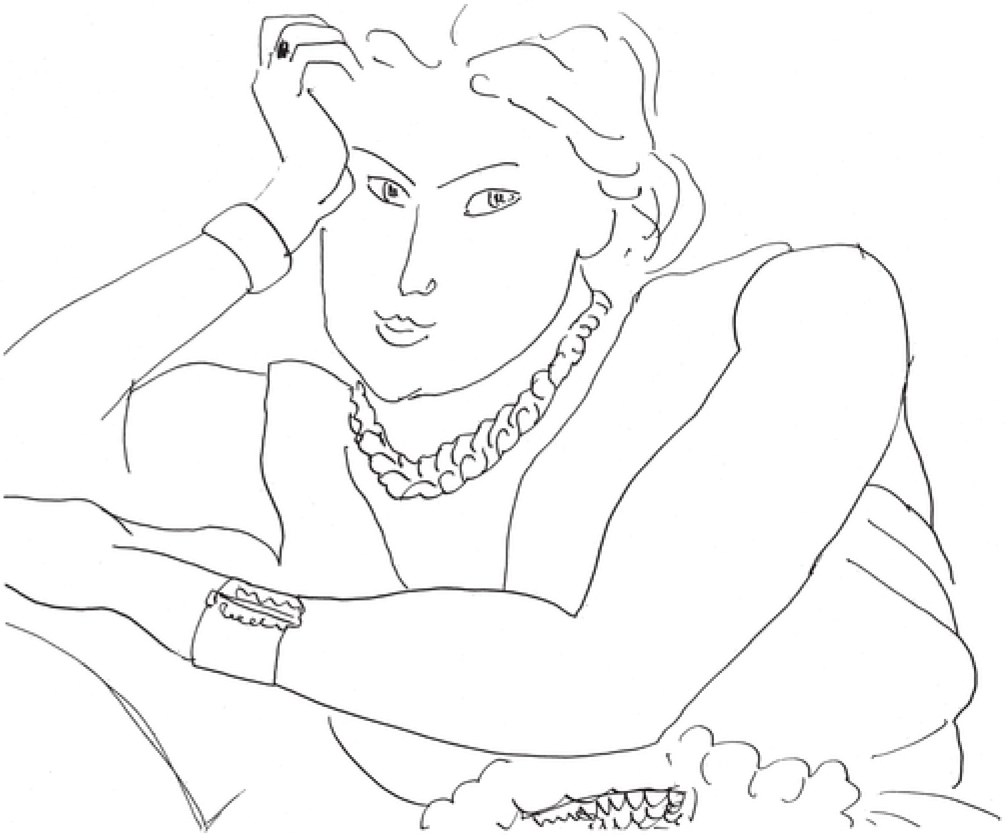


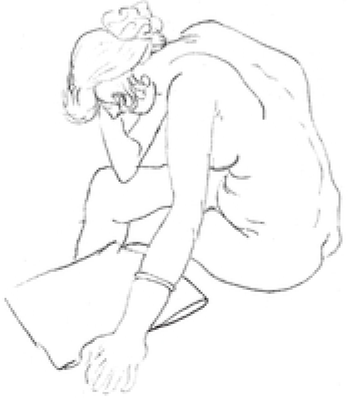
PICASSO. Contour drawing





PICASSO. In most contour drawings the line is comparatively even in intensity. Yet the even quality of line is not always its distinguishing element. In the drawing above, for example, Picasso draws quite sharply and firmly in some places, and very lightly, almost imperceptibly, in other parts of his design. The quality of the line in the dry point below is keen and sharp throughout.

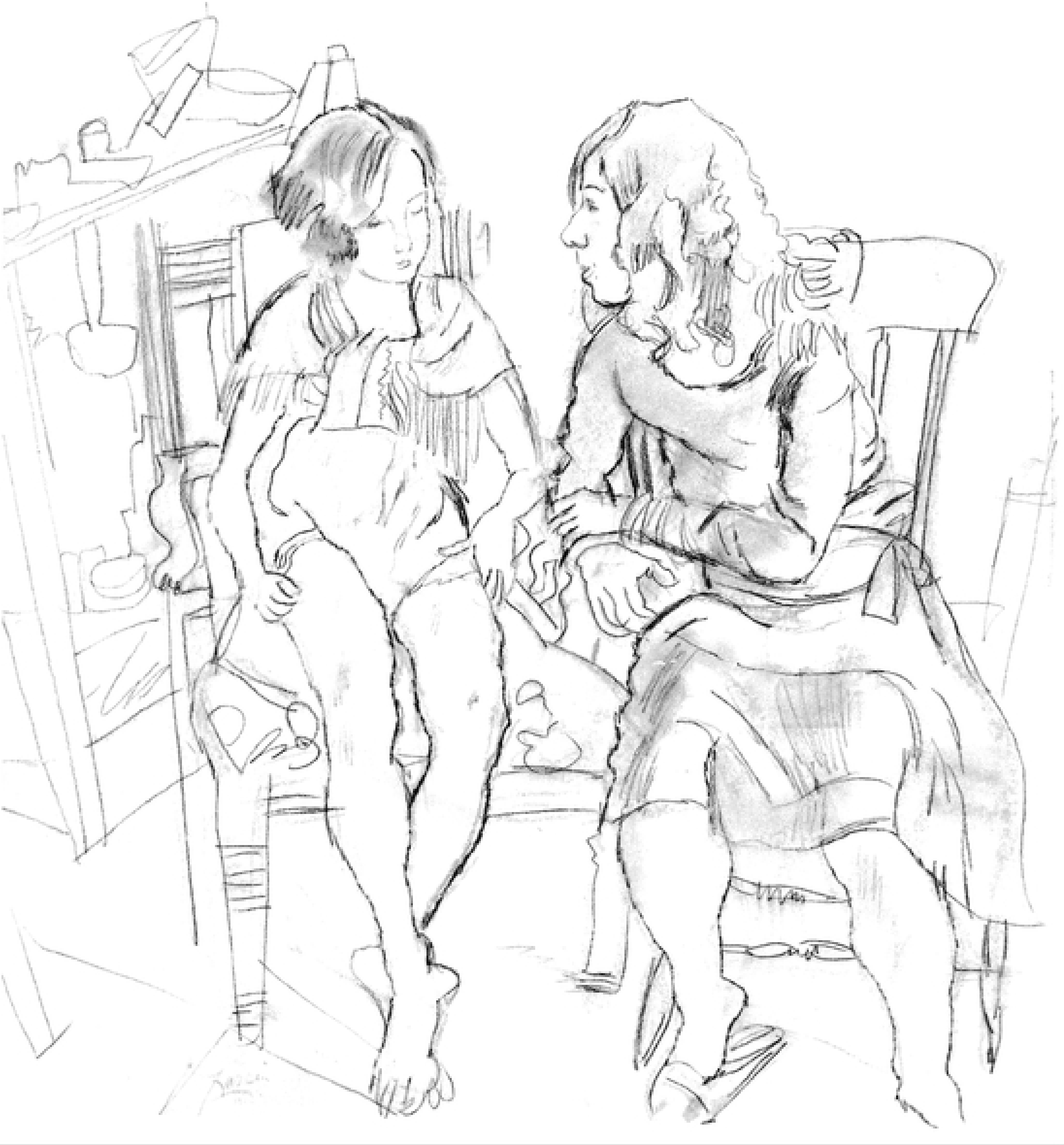




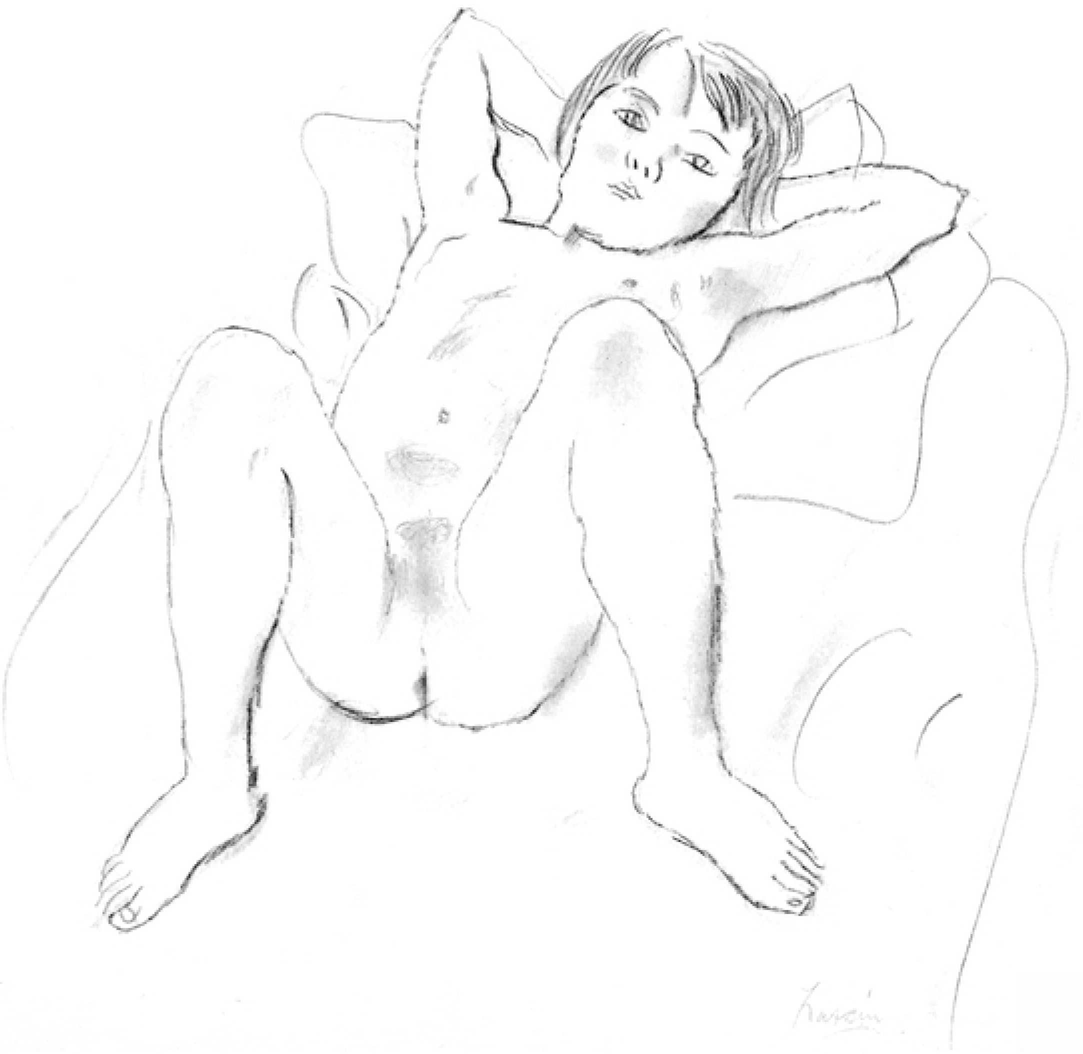
MATISSE. Although the drawing above is done in pen, and the lower one in pencil, the line is even in intensity throughout.

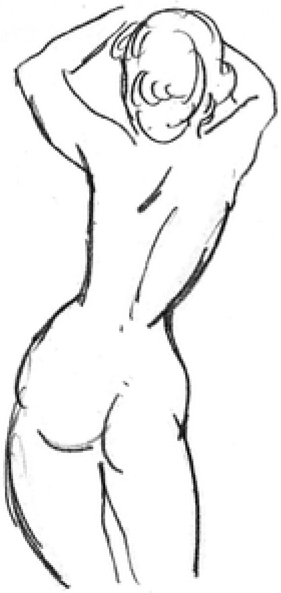
We must remember that in art there is no “right” or “wrong.” The differences between Picasso and Matisse are natural; they stem from their personalities and sensitivity for doing what they feel is appropriate at the time the drawing is made.

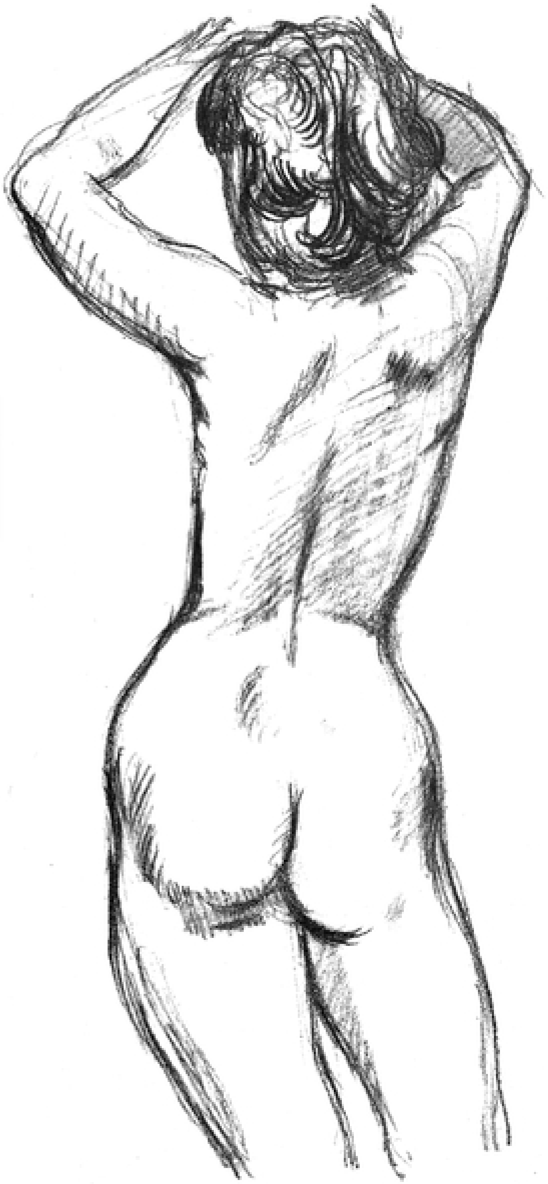
PASCIN. Pencil and charcoal drawing



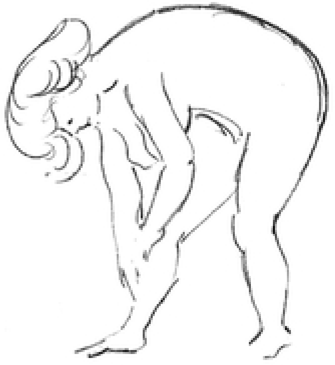
PASCIN. Pencil drawing

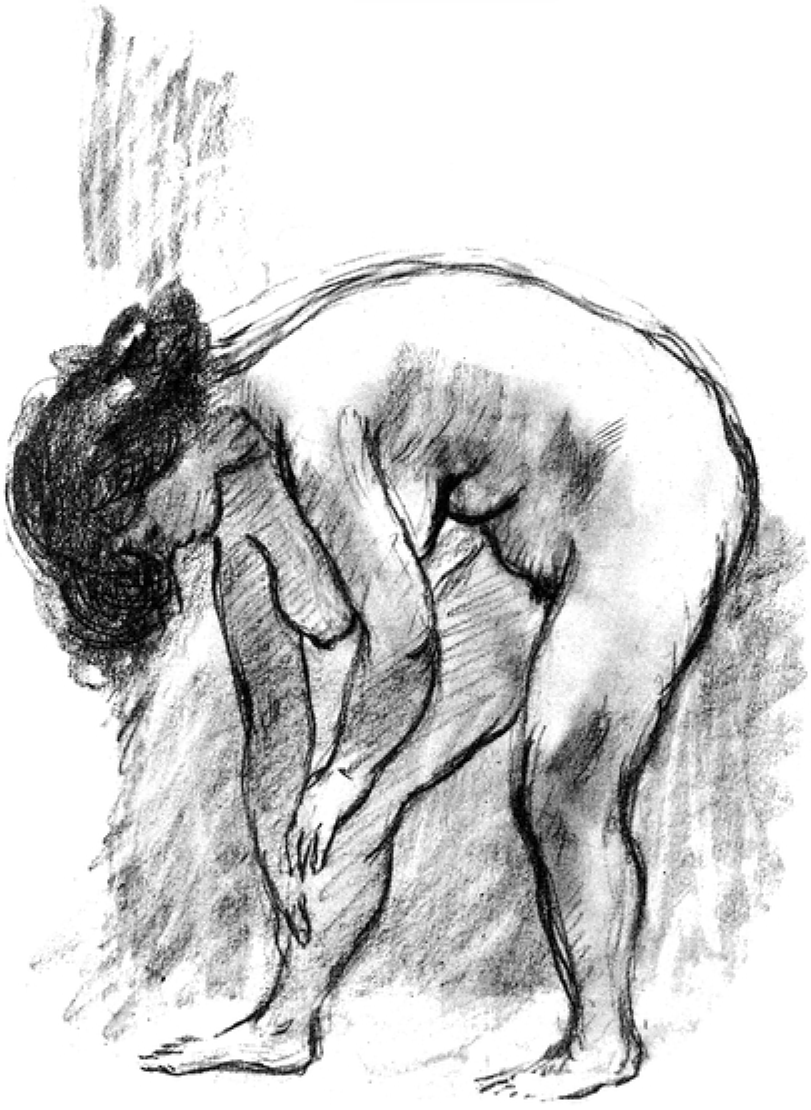




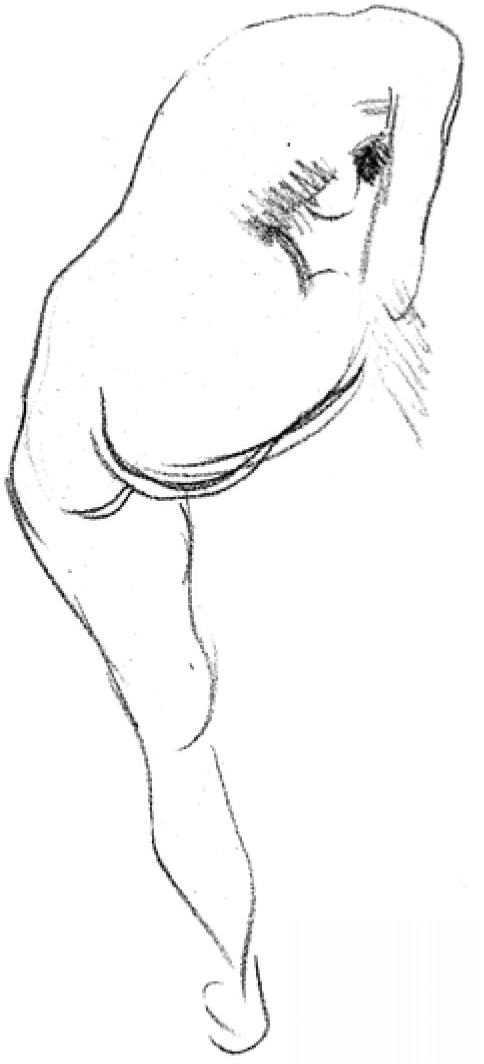


DOBKIN

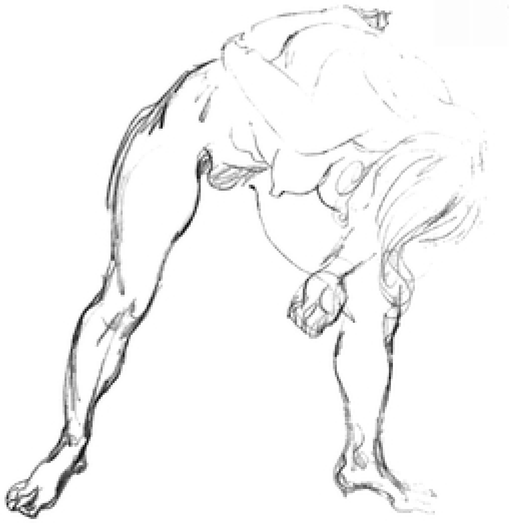




DOBKIN

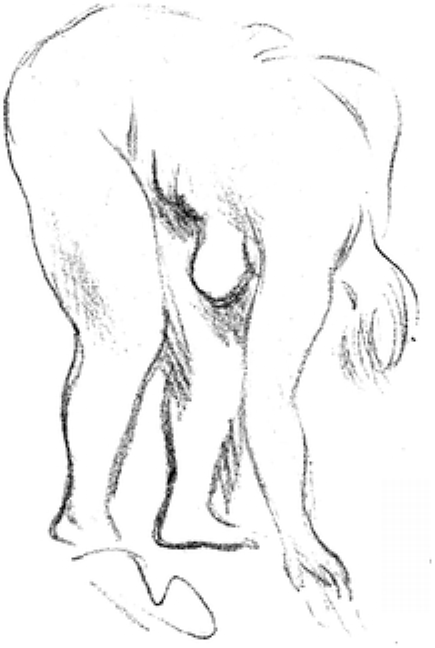


MOSES SOYER

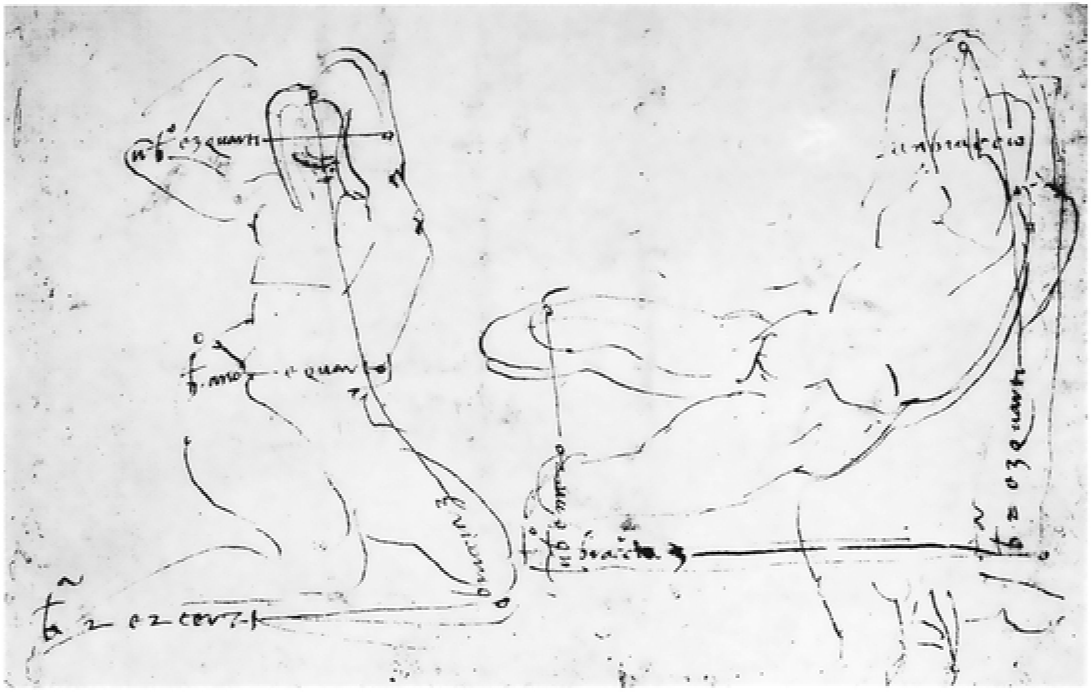


REISMAN

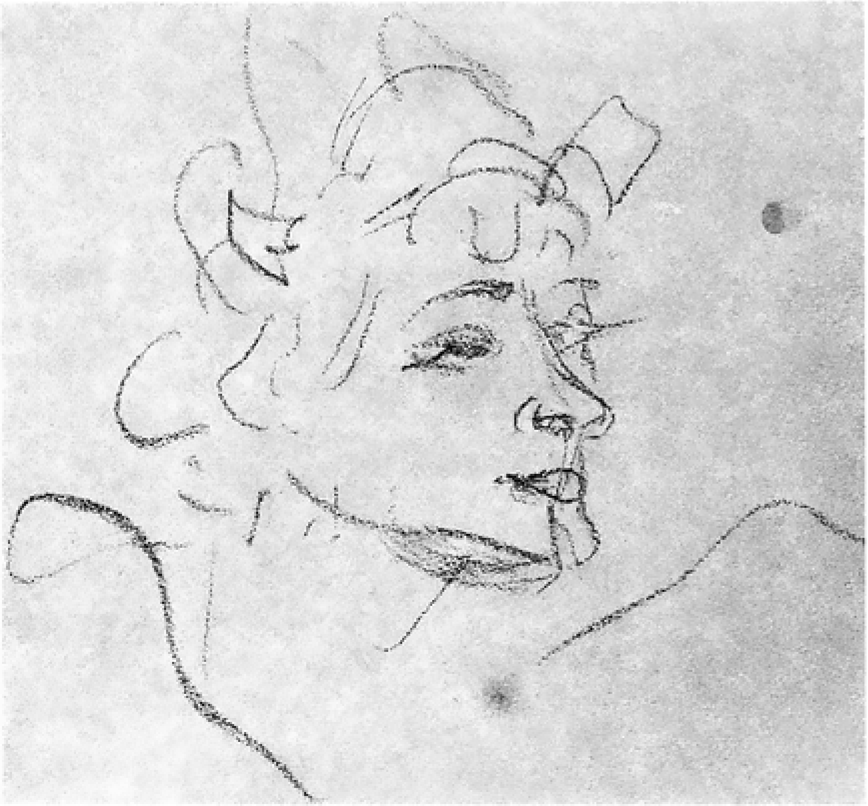
The purpose of reproducing the work of five different artists on these two pages is to show that, despite the personal differences in style and influences of time and place, there is a similarity of approach that is probably the result of the common objective which these artists shared. This objective was to indicate as rapidly as possible the main directions of the figure in action.



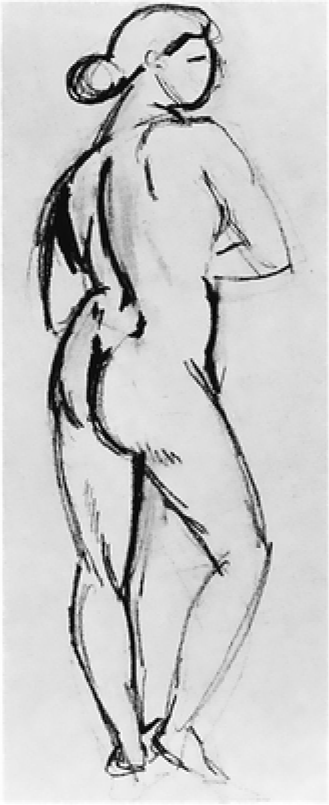
MOSES SOYER



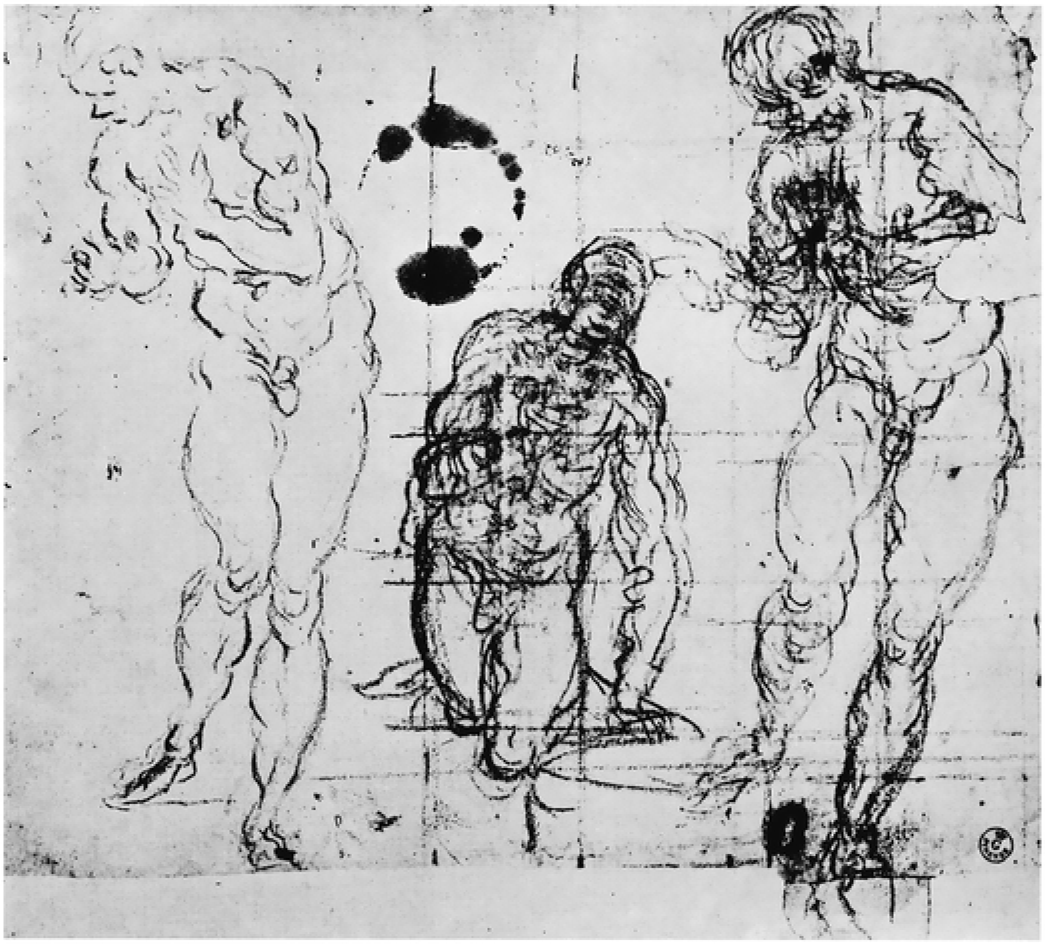
MICHELANGELO

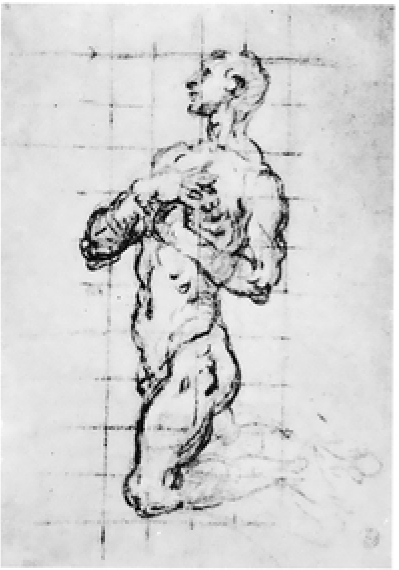


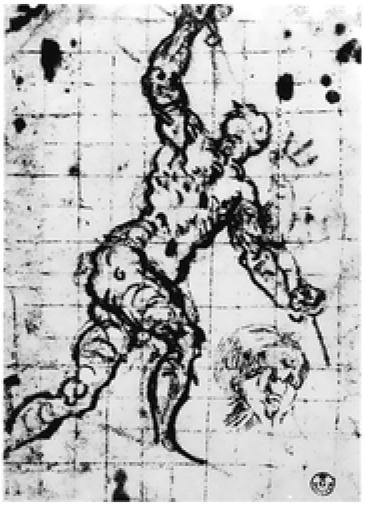
TOULOUSE-LAUTREC



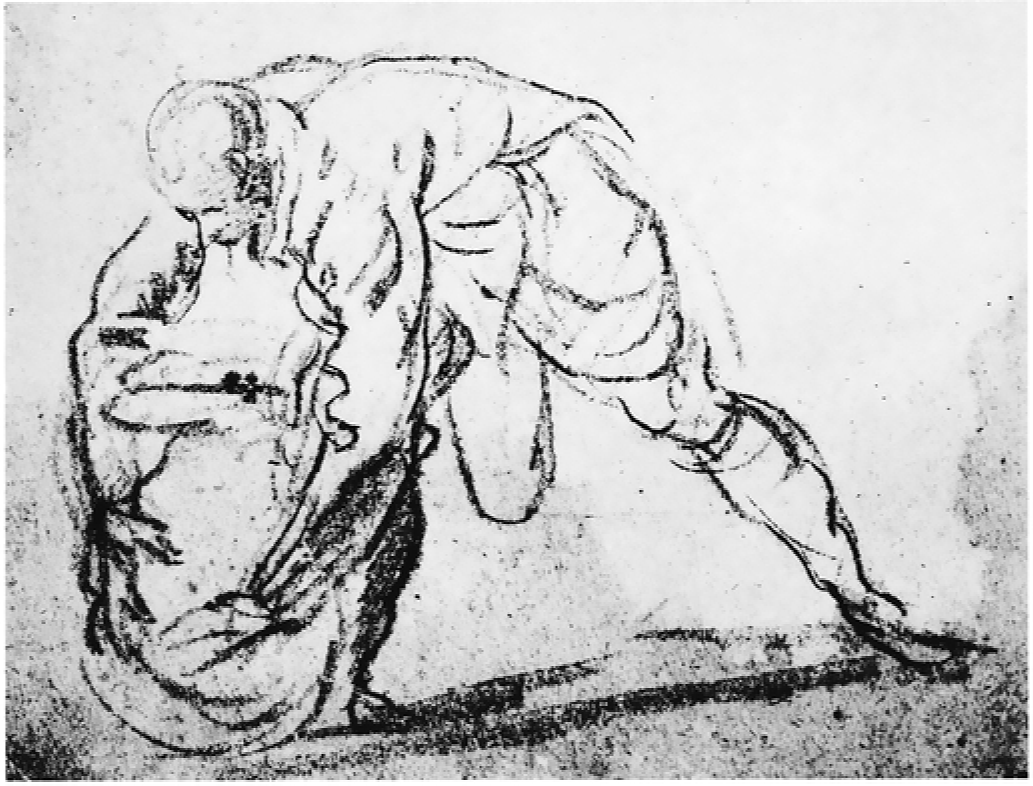
MATISSE

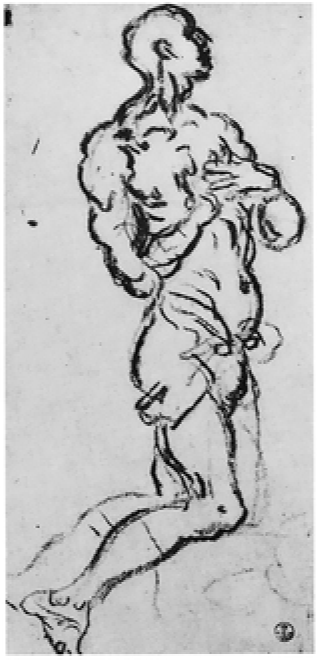






TINTORETTO

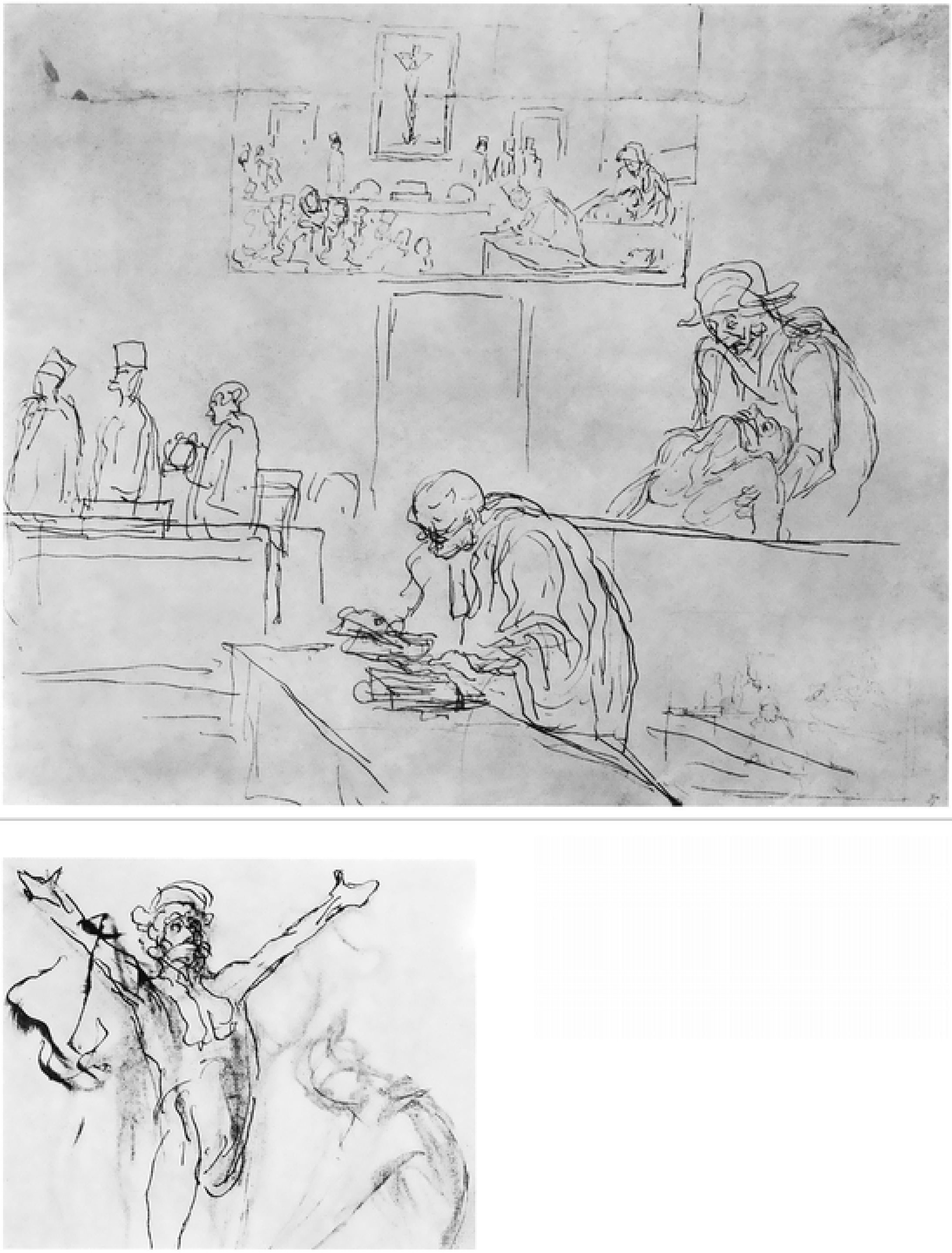




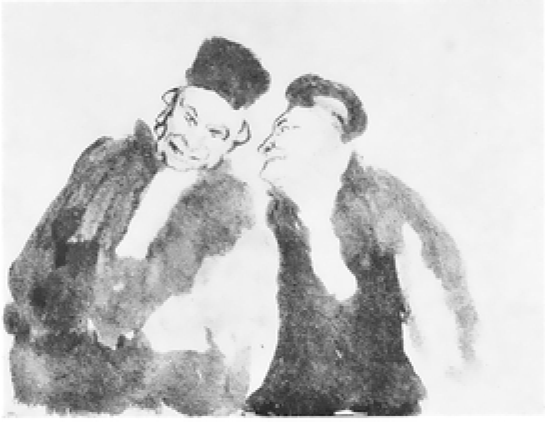
TINTORETTO was a busy man. To him, as to most artists of his time in sixteenth-century Italy, the idea of "art for art's sake" was unthinkable. Like commercial artists today, he painted for use. The orders for murals *came in rapidly and were executed by him with equal rapidity. He painted so fast that even his contemporaries, who also knew how to work quickly, frequently gave up hope of competing with him.*

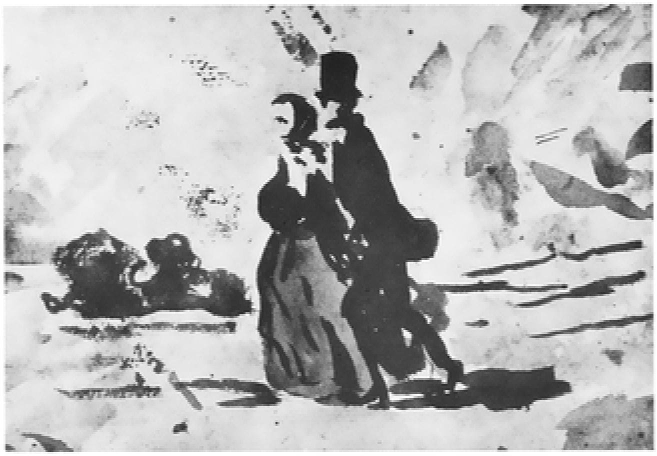
It is not surprising that all his drawings or studies for his paintings are fast and direct in approach. The movements and anatomical details are always indicated with a quick and masterful stroke. His was truly a functional and natural way of drawing because it was conditioned by definite needs.

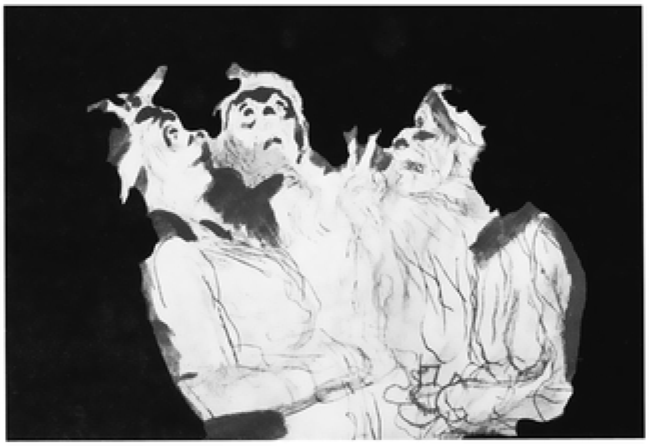
Still another characteristic of his drawing is a kind of incompleteness, a constant searching for form which emerges gradually. This method of expression is the type which, for the sake of convenience, I call the "trial and error" method.



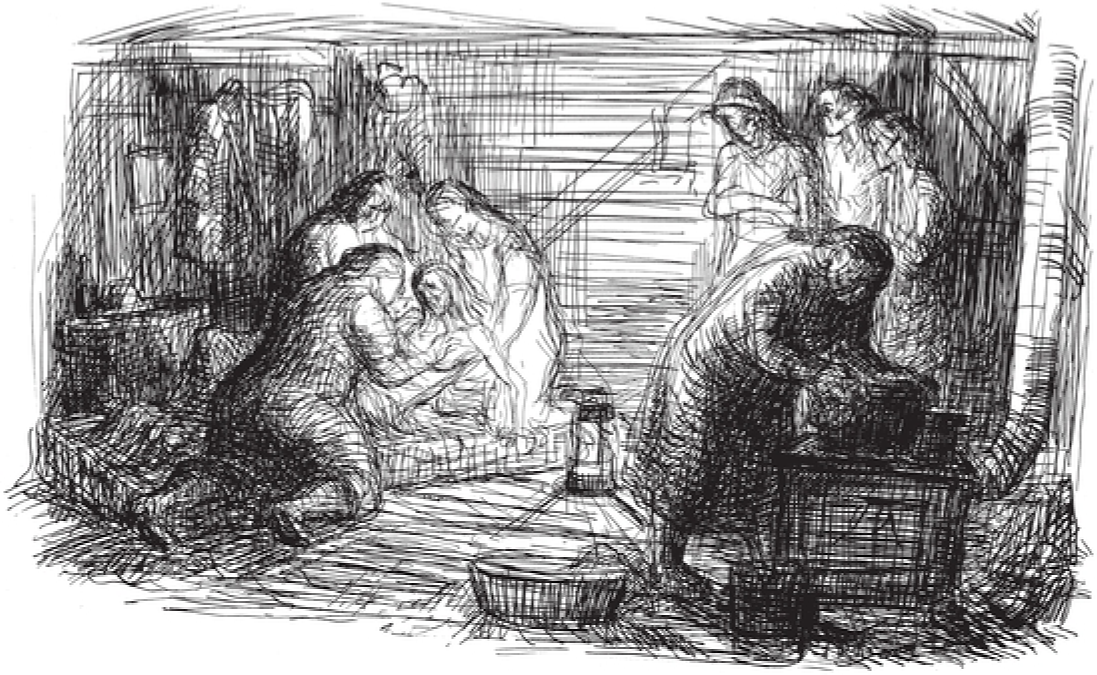
DAUMIER. A thumbnail sketch of one composition within a detail of the same subject, and the little sketch below, are indicated very rapidly by the artist.

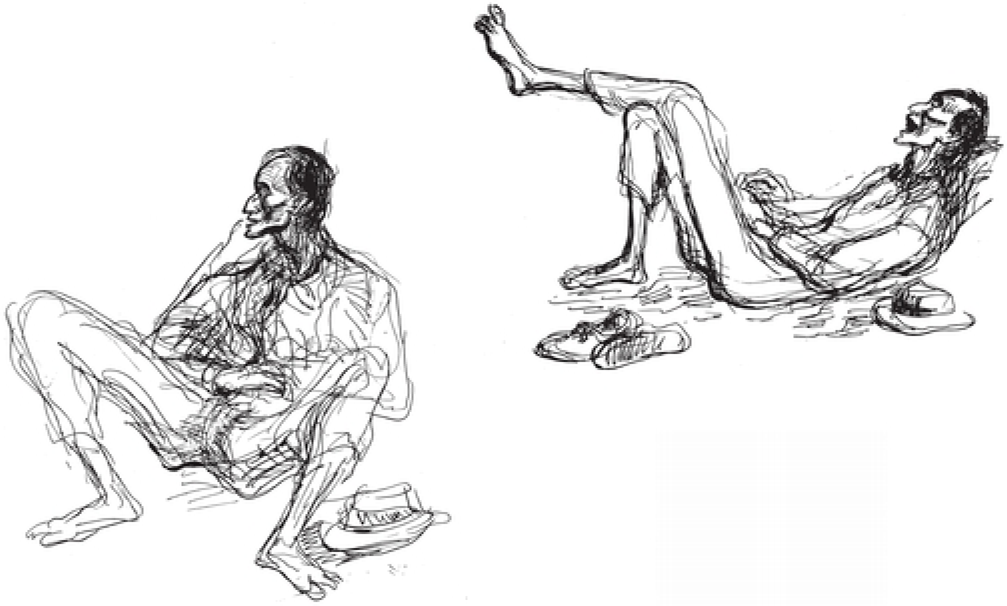




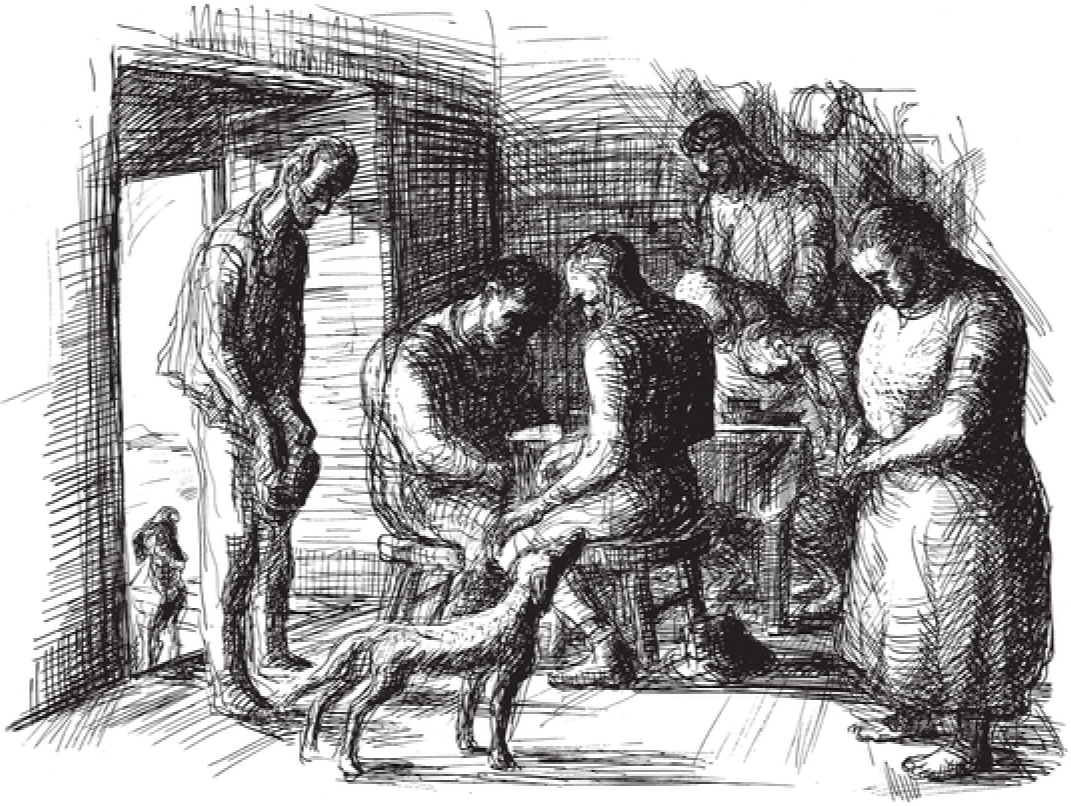


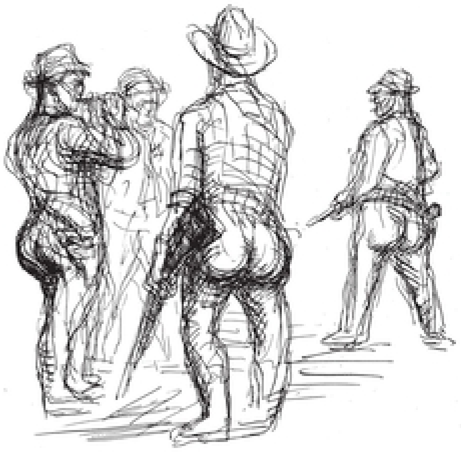
DAUMIER. For quick indication of an idea, an artist often abandons the pen or pencil and takes up a brush. The reason is that a wash drawing is better suited to express dark or light areas. Also, a study made with brush and ink is closer related to painting than one which is drawn with a pen or a pencil.



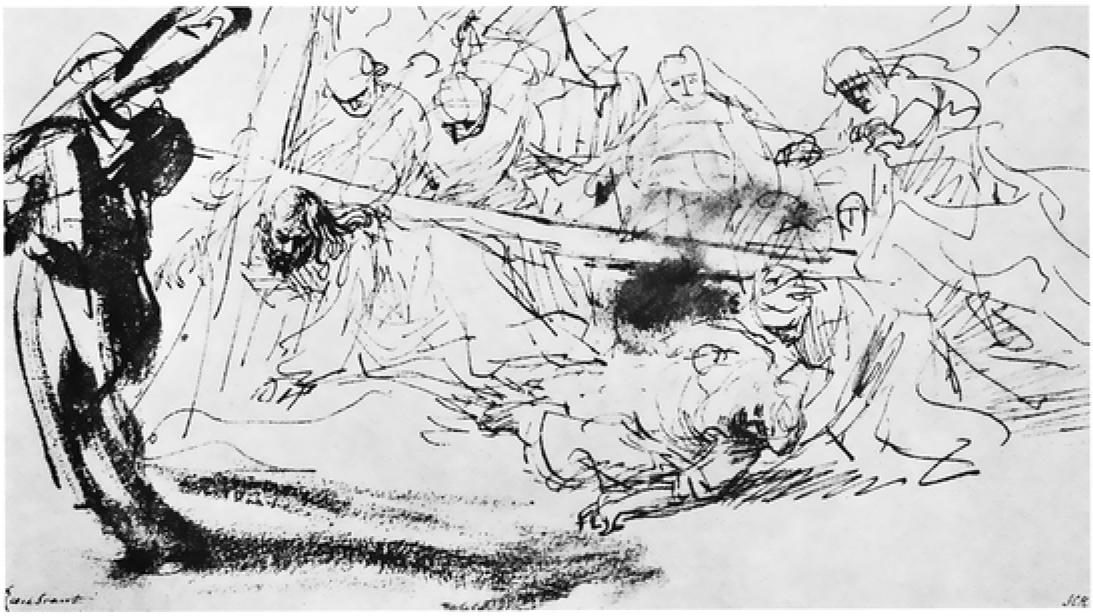


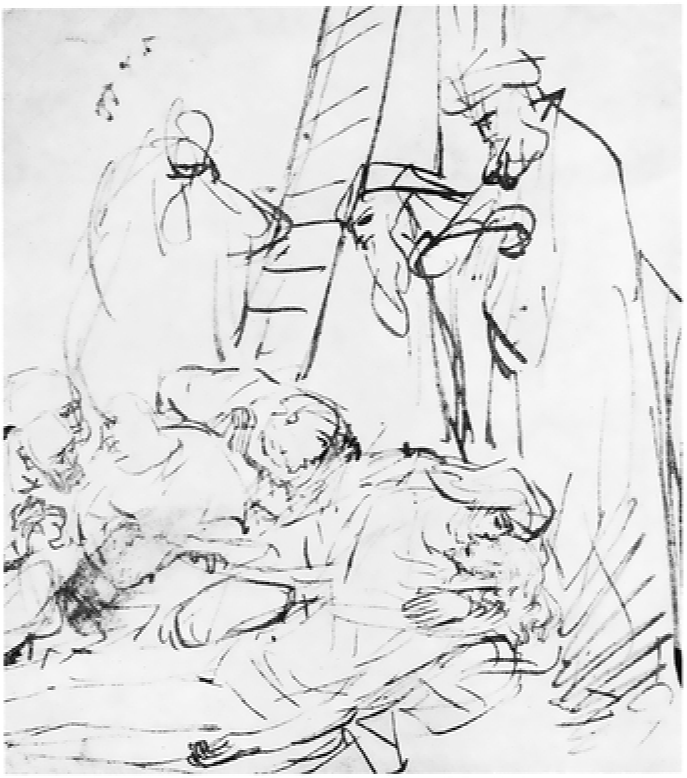
GROTH



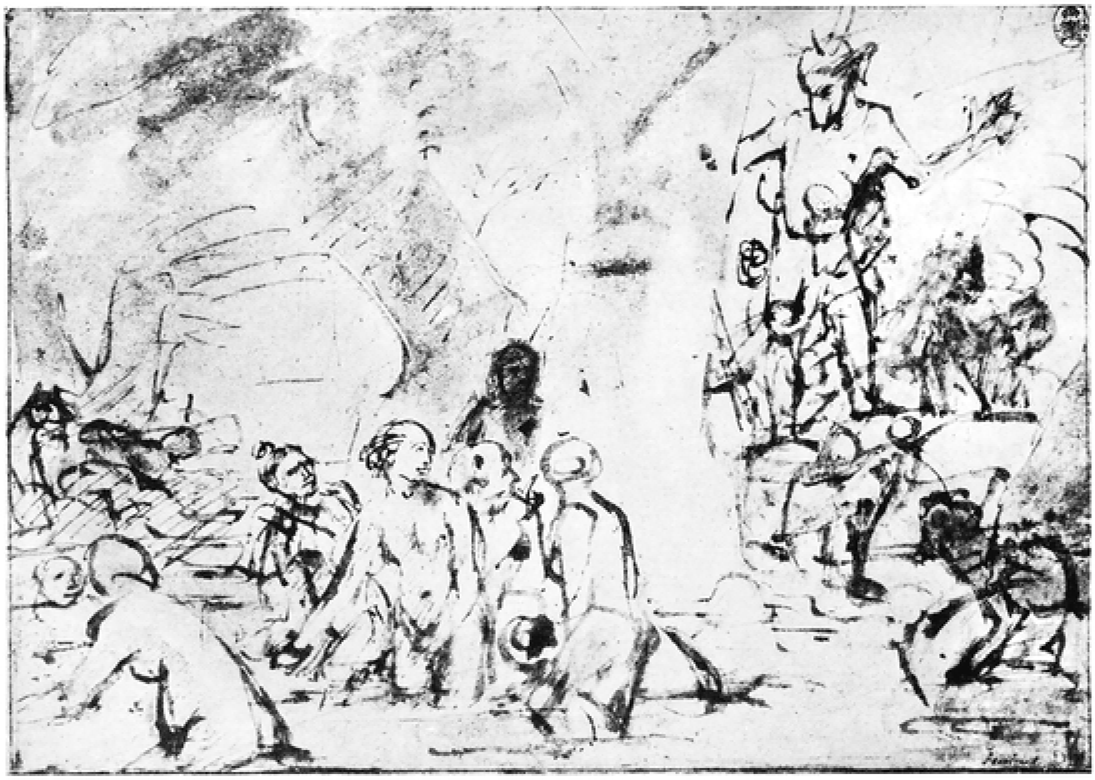


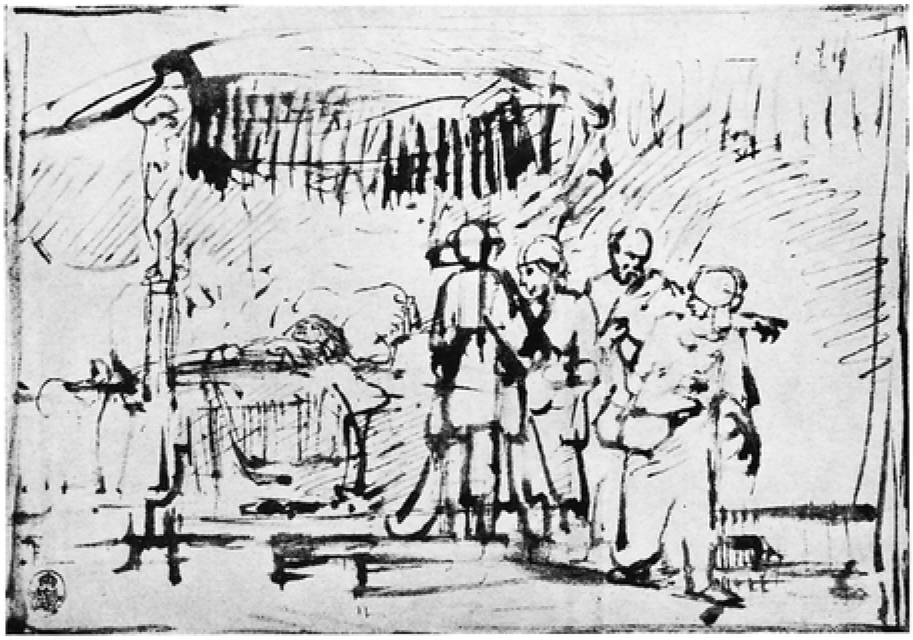
GROTH. John Groth's drawings are built up stroke by stroke. Nothing is ever erased, corrected, or started in pencil. He begins to draw with ink immediately. If he is dissatisfied with a drawing, he discards it and starts another. It is not unusual for him to do 25 versions of the same thing. When a drawing is complete it contains within it every line from the beginning to the end. Perhaps that's one of the reasons why his designs are so alive.



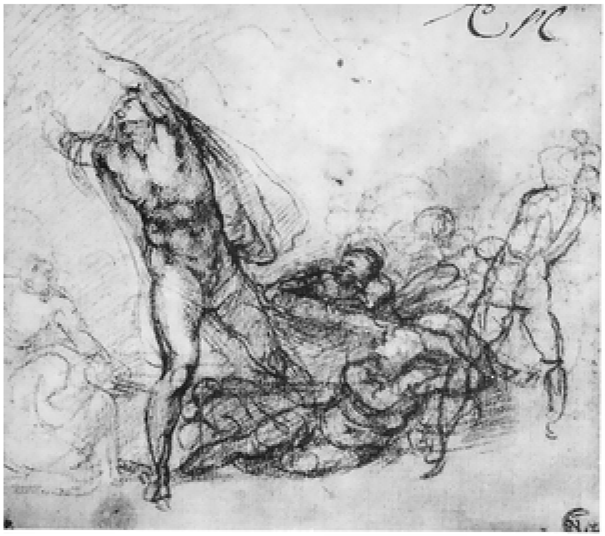


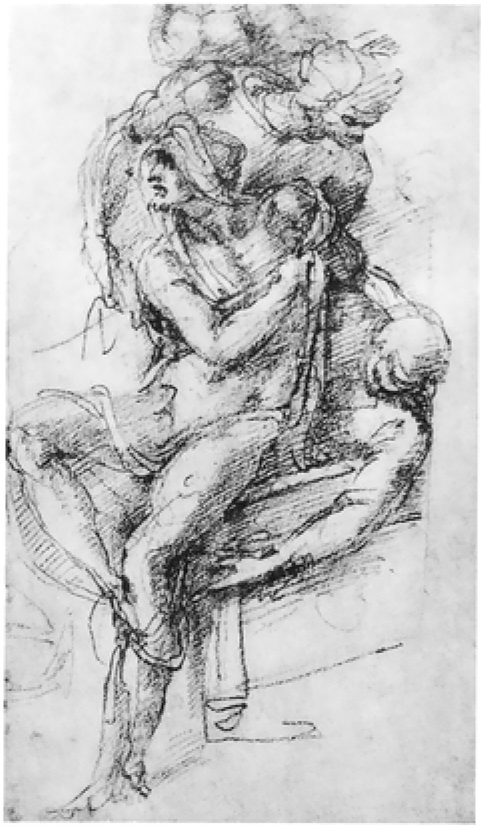
REMBRANDT. The medium with which the artist expresses himself matters little. In the drawings on these two pages, the idea was to indicate as rapidly as possible the main lines of the composition. Only here and there do we begin to discern some recognizable figures and faces.



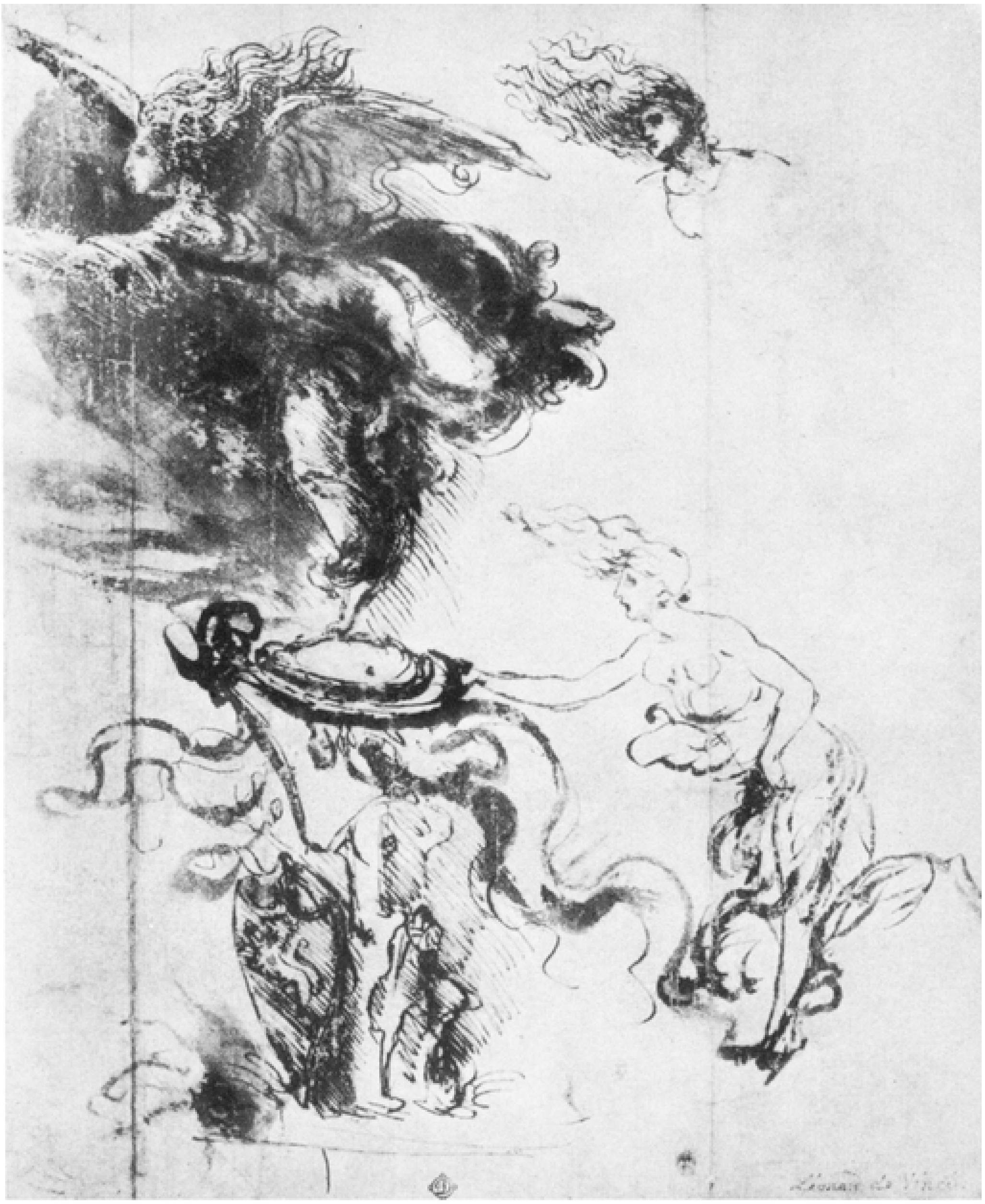


REMBRANDT

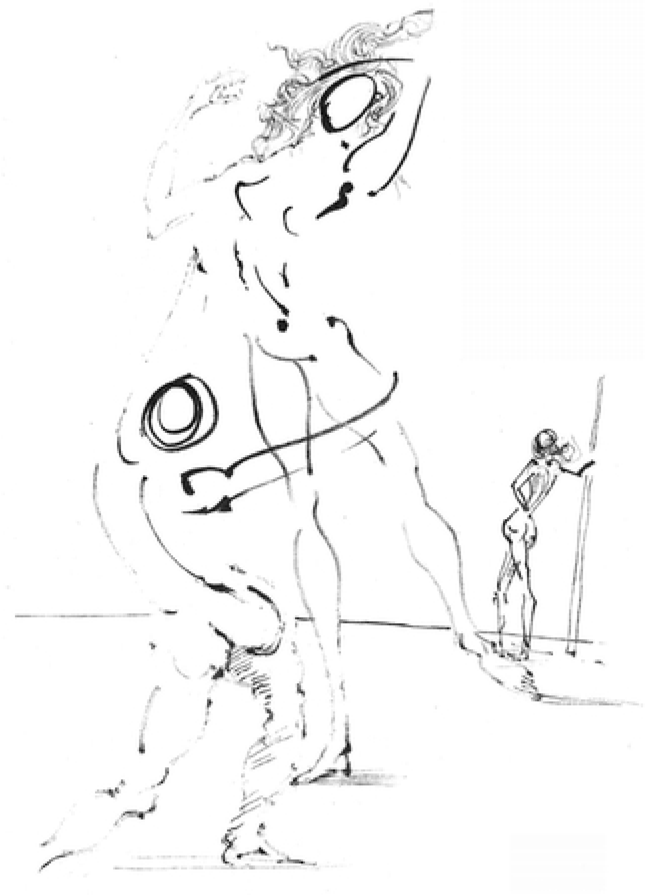




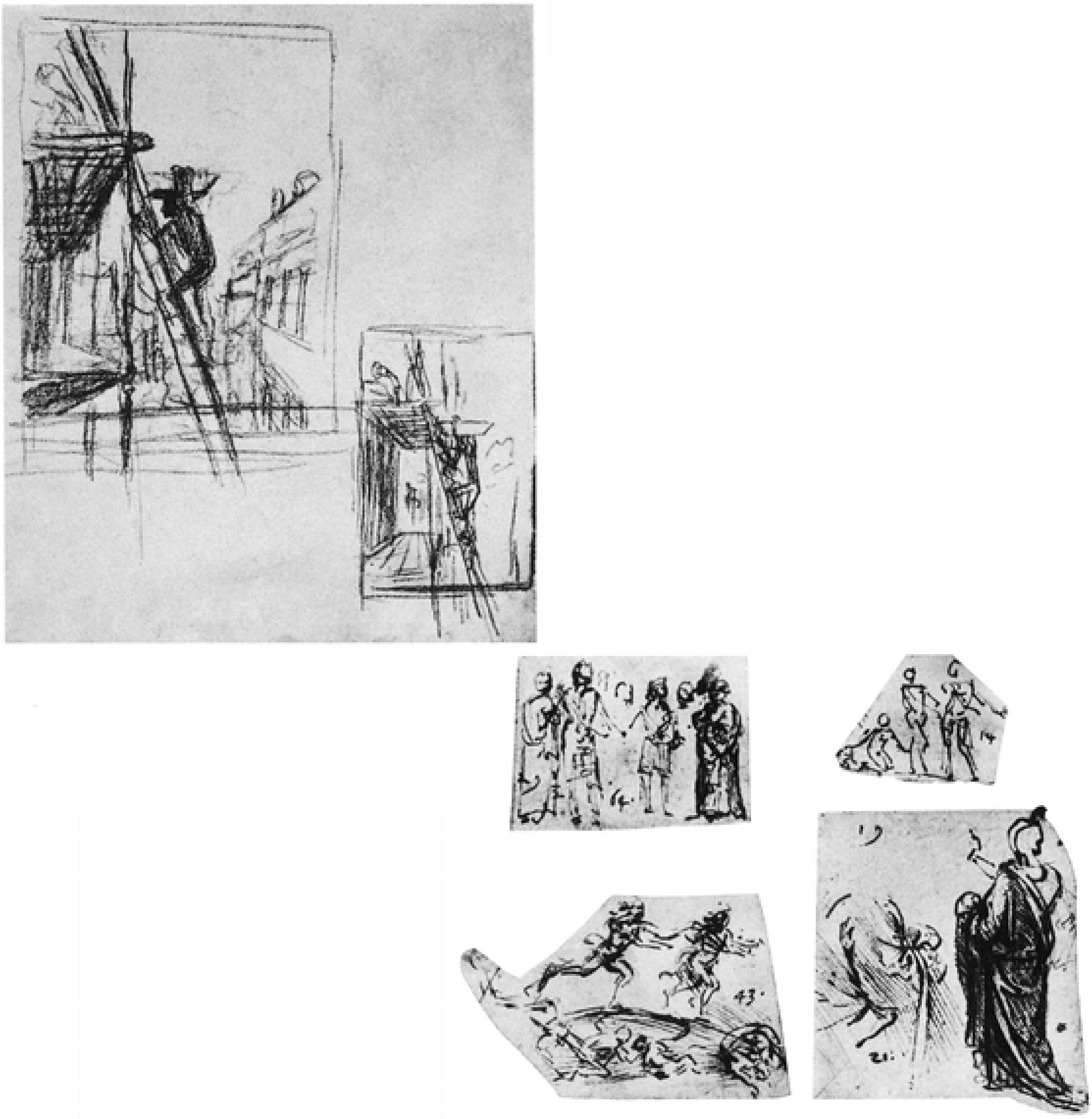
MICHELANGELO. On these pages movement and relationship of lines and areas—composition—were what concerned the artist. “Finish” obviously mattered much less. Yet these designs are complete. As studies for larger works, they answered the purpose well. As drawings, they are infectious in their emotional appeal, directness, and sureness of of touch. In the *drawings of Michelangelo and Leonardo the relationship of darks and lights—pattern—is resolved in a striking and intense manner.*



LEONARDO



DALI

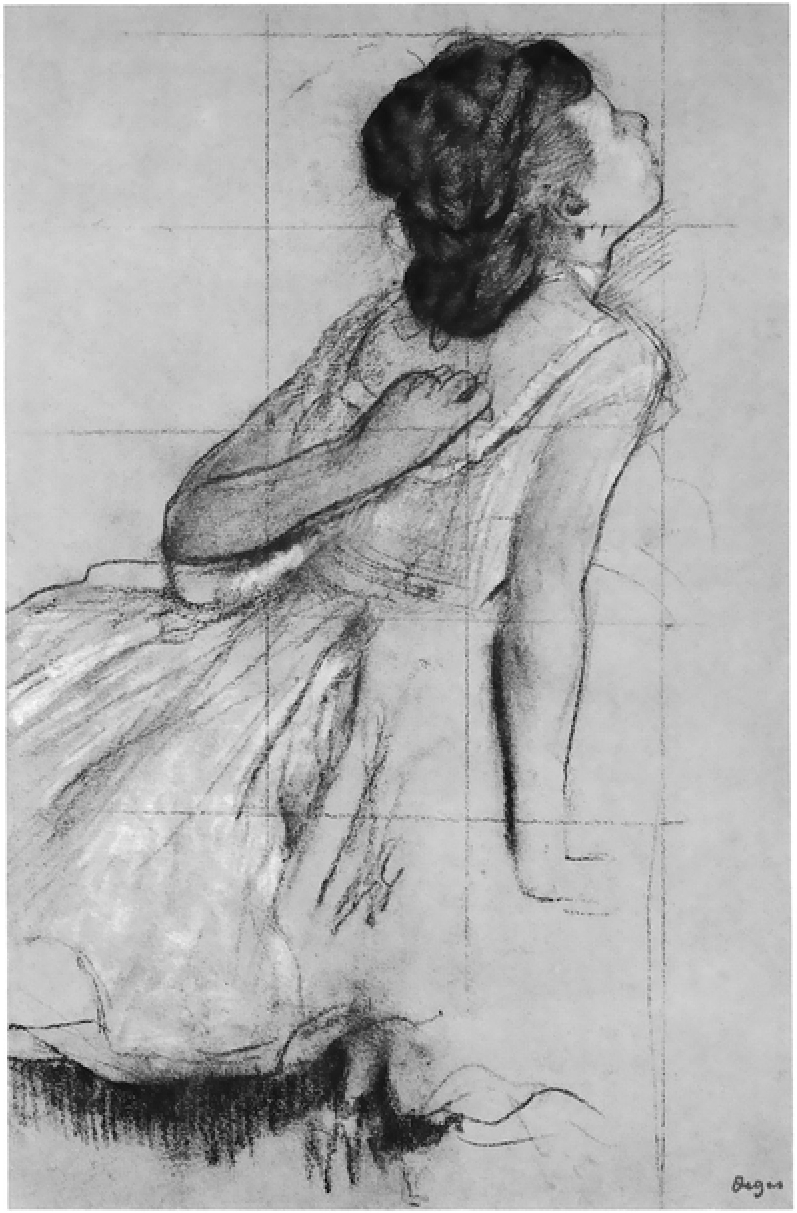


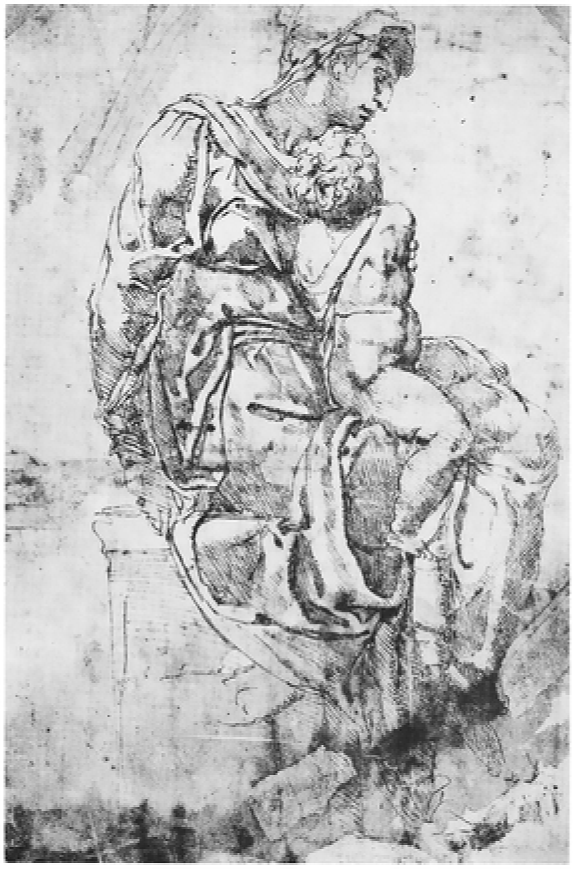
LEONARDO. *The thumbnail sketch is one of the artist's favorite means of starting his first draft of a composition. There are several reasons for it. First, a small sketch can be made and changed rapidly. It can be done anywhere: on a street corner, at a dinner table, in a busy restaurant. Only a small piece of paper and a pencil are required. Second, since our mental concept of form occurs faster than we can realize it graphically, rapidity in jotting it down becomes an important factor. Obviously, a very small drawing allows for quicker realization of our mental image. Third, a smaller composition is often truer to a painter's concept of a painting, for the confined space precludes all details and stimulates the artist to think in broader and more significant terms.*

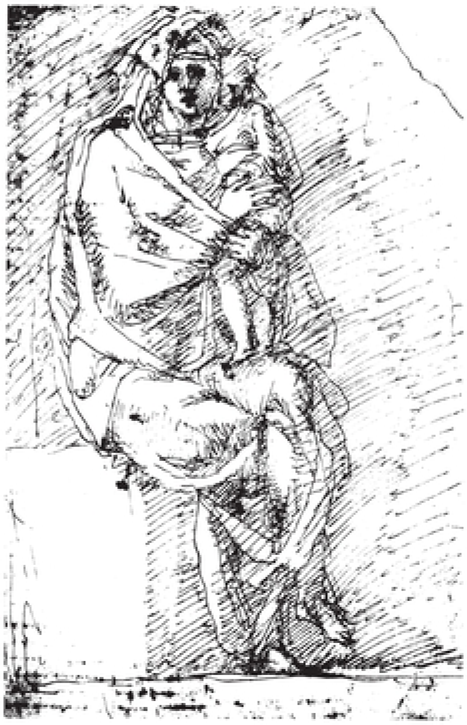
The thumbnail sketch naturally falls in the realm of "rapid indication" because it concerns itself primarily with the main movements and patterns of a composition.

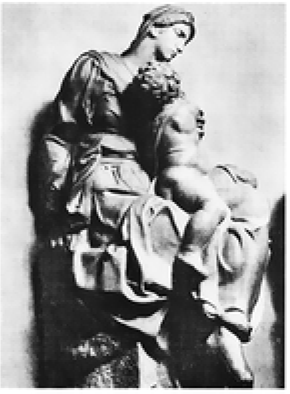
DEGAS. Most of us have seen a "squared–off" drawing many times. It is not uncommon to find a Degas or a Tintoretto marked off thus, for "squaring off" is a common method of redrawing or enlarging a drawing.

The sketch is divided into a number of squares which will be duplicated on the larger surface. Then it becomes a relatively mechanical process to enlarge the original drawing section by section.

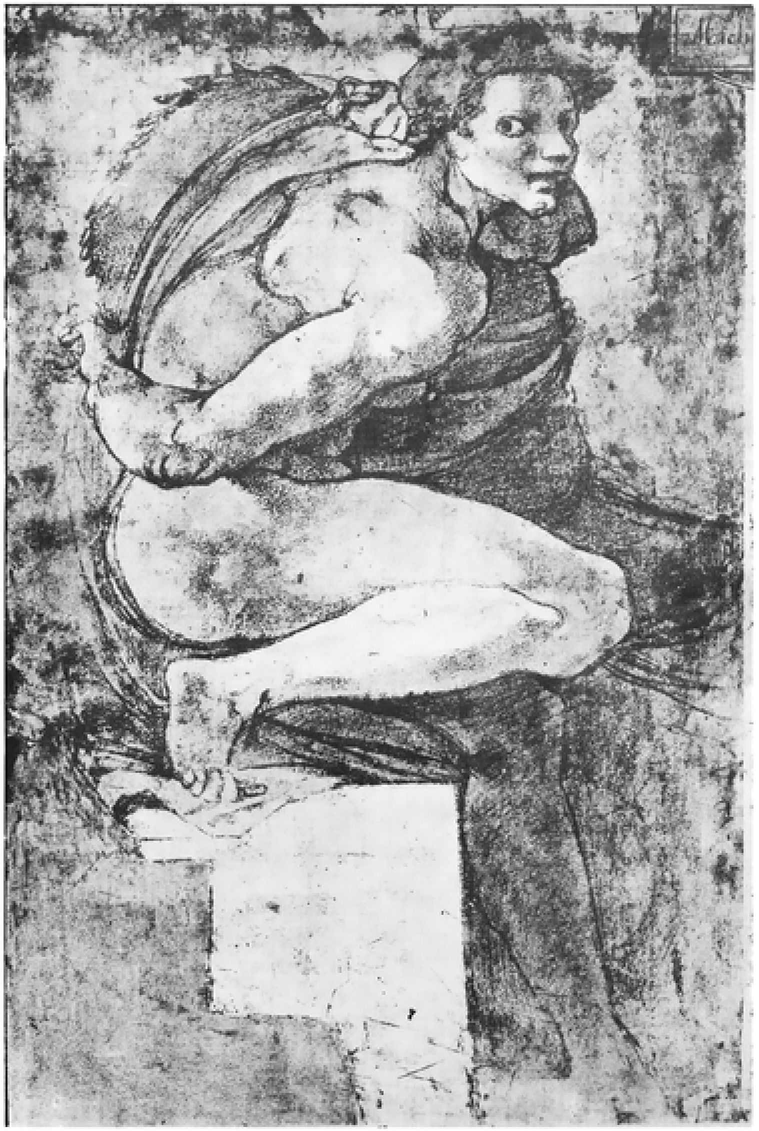

Degas

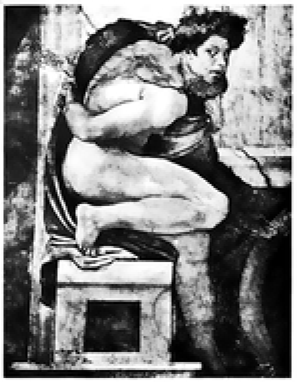




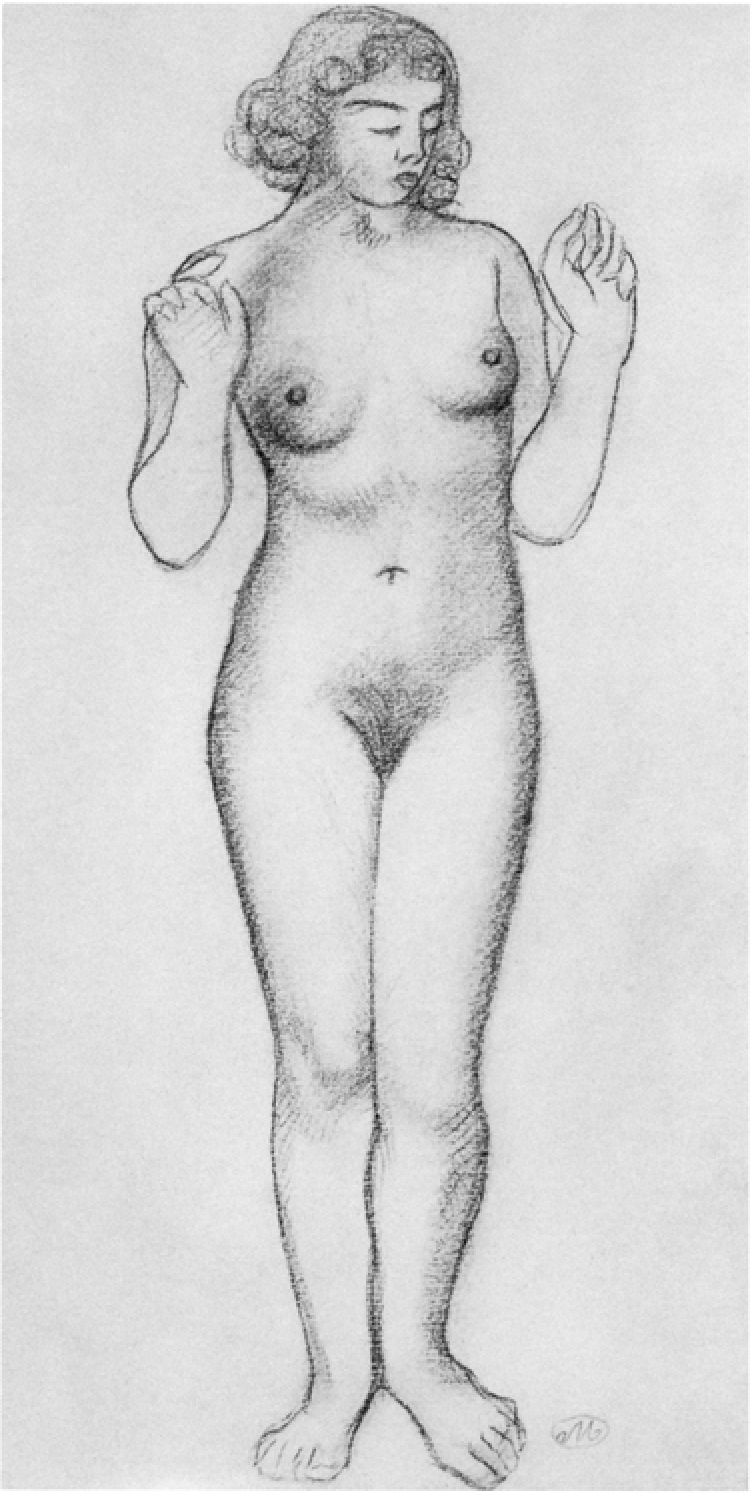


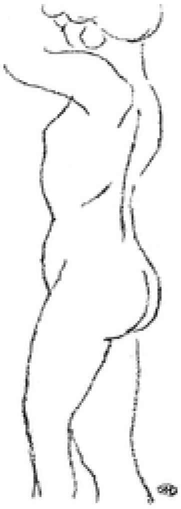
MICHELANGELO. There are many painters who do not sculpt, but I know of no sculptor who does not draw. It seems that drawing is the beginning of all the plastic arts. These drawings are studies for the sculpture reproduced below.





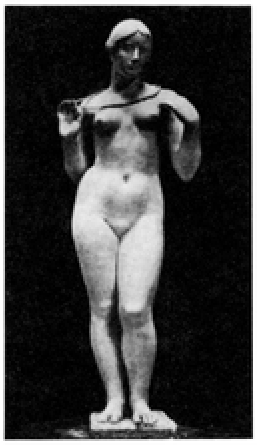
MICHELANGELO. It is interesting to see that although all the drawings on these pages are done by one man, the quality of the drawing is conditioned by its ultimate use. In the studies for the sculpture (opposite page), there is *always the feeling for a free-standing solid form, while in the study for the fresco on this page there is an awareness of a two-dimensional space upon the wall surface.*





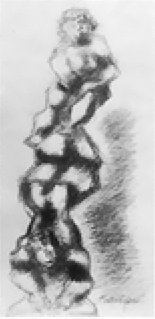
MAILLOL

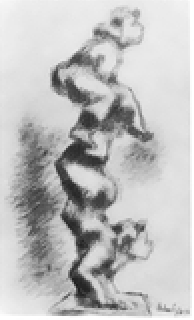
(LEFT) Drawing for sculpture reproduced below.

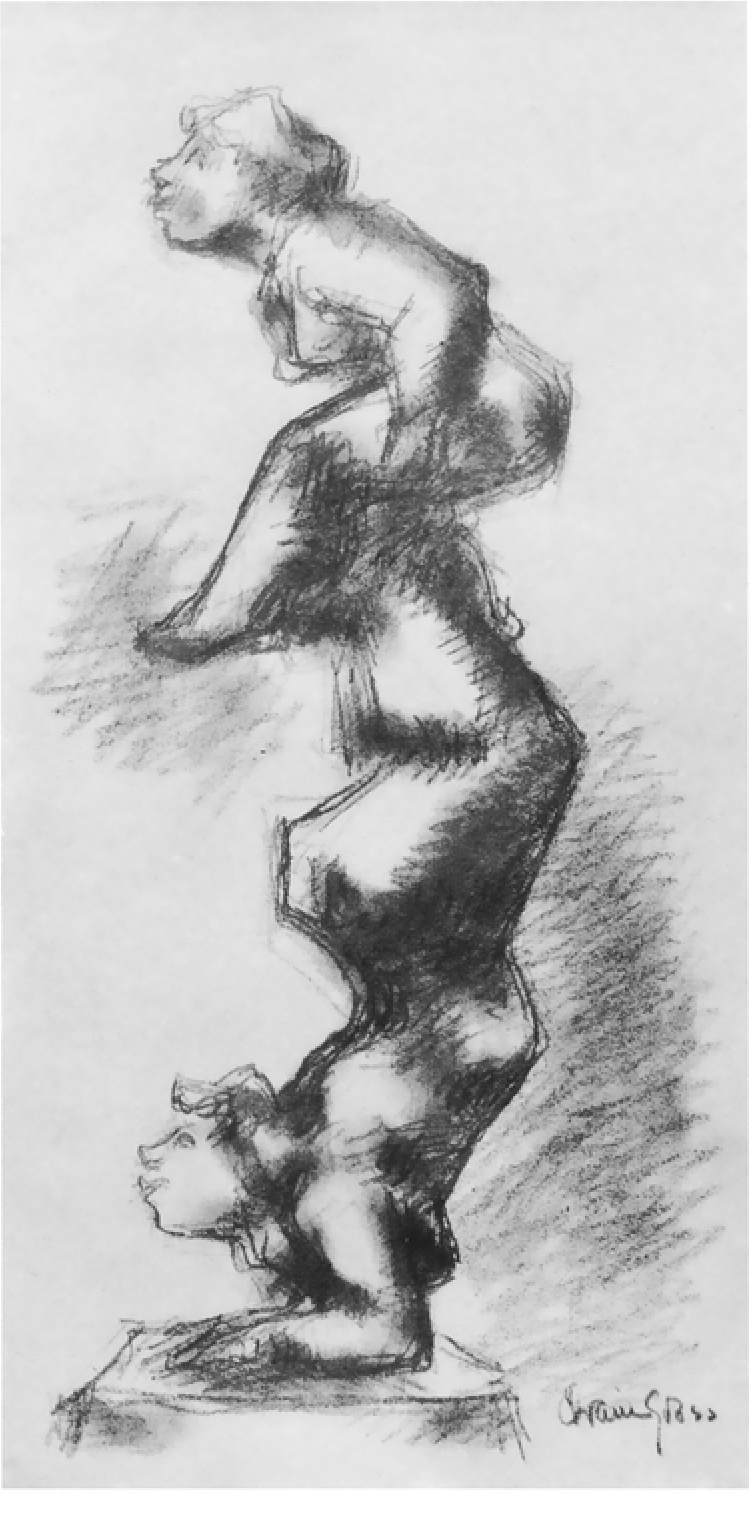


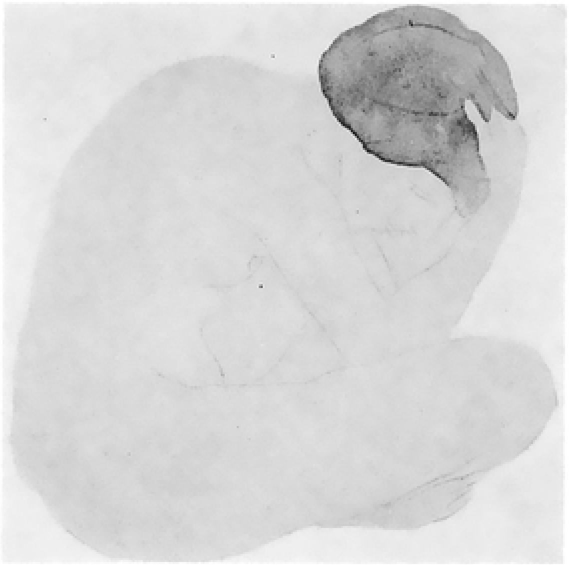
CHAIM GROSS

Three drawings (two sides and front) by Chaim Gross for his statue. Notice how carefully he indicates the raised and the receding surfaces in these studies.

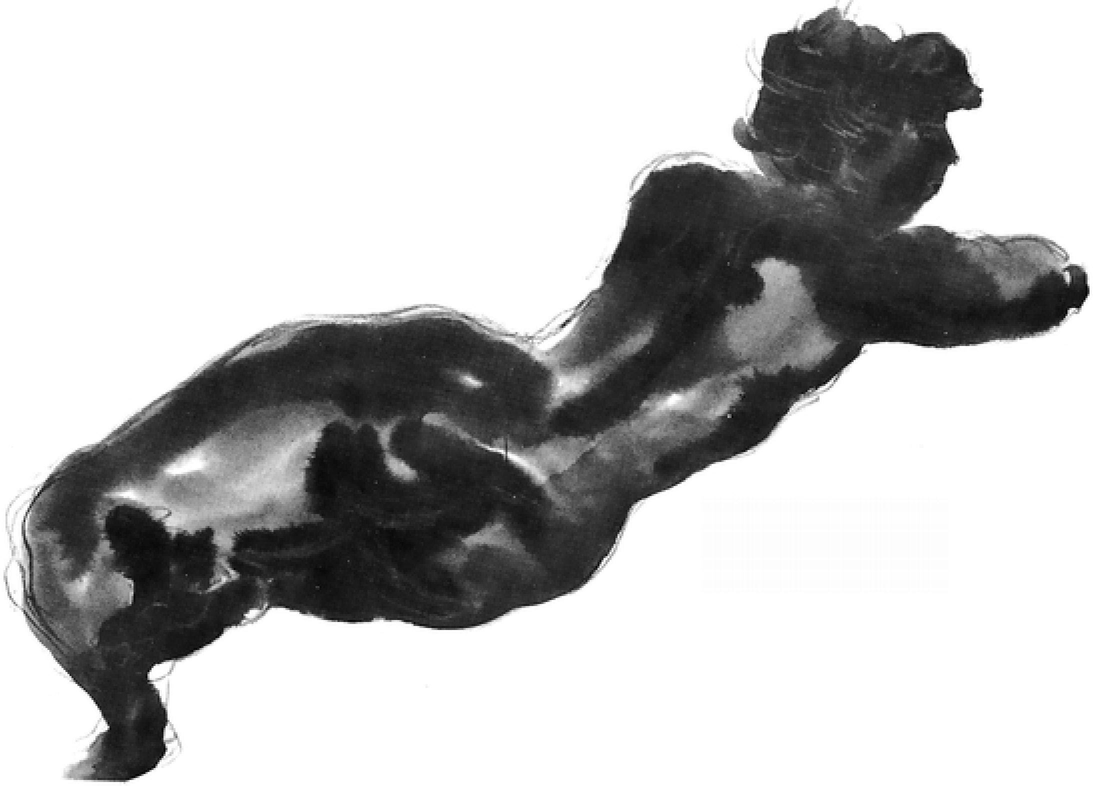




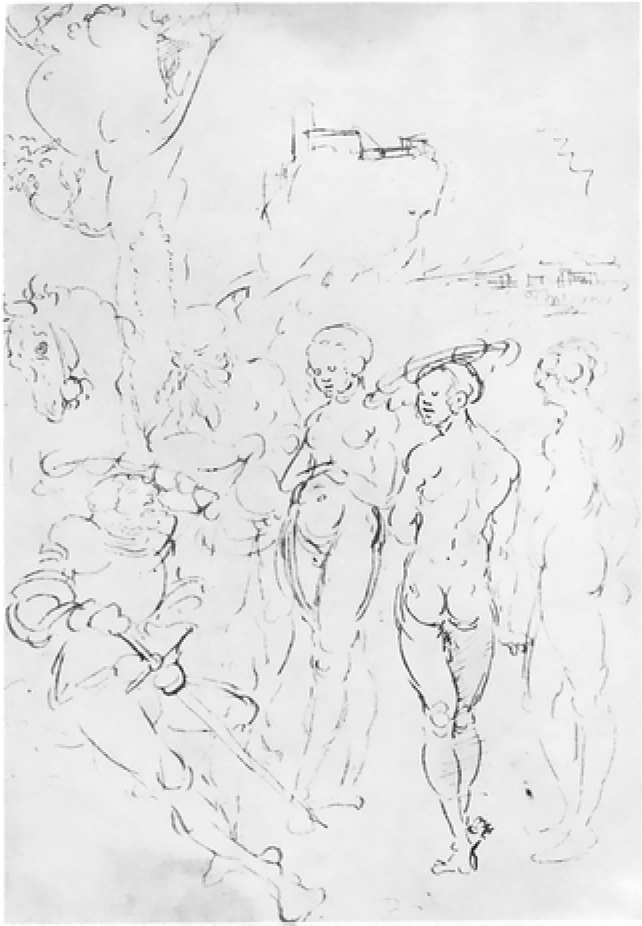

Chaim Gross

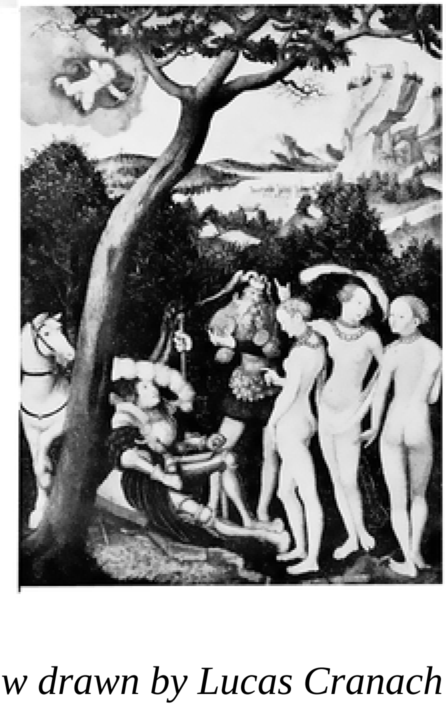


RODIN. The sculptor's preoccupation with a solid and the eventual silhouette of the completed sculpture is clearly reflected in these two drawings. Notice how well the entire form of the figure by Rodin would fit into a definite contour defined by the natural shape of the stone chosen for this figure.

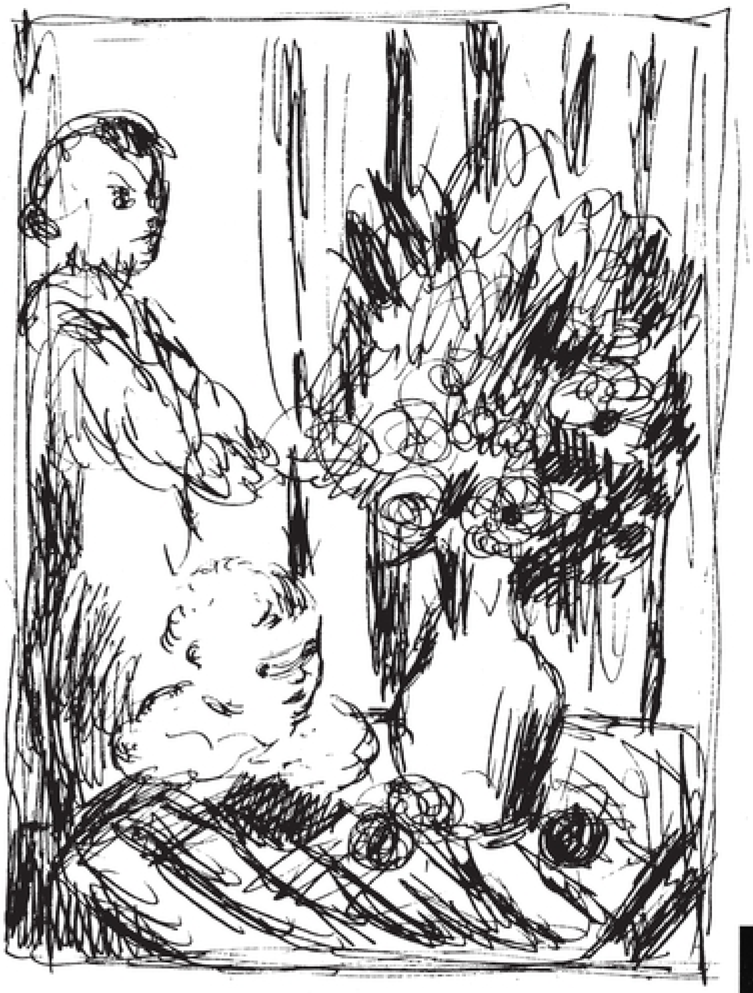


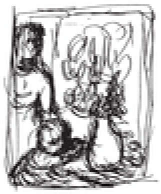
CHAIM GROSS

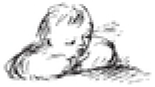


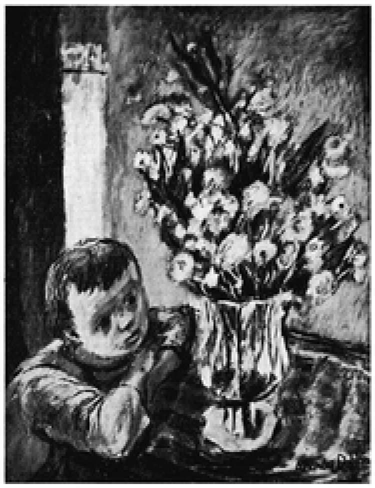


CRANACH. A design for the painting below drawn by Lucas Cranach the Elder.

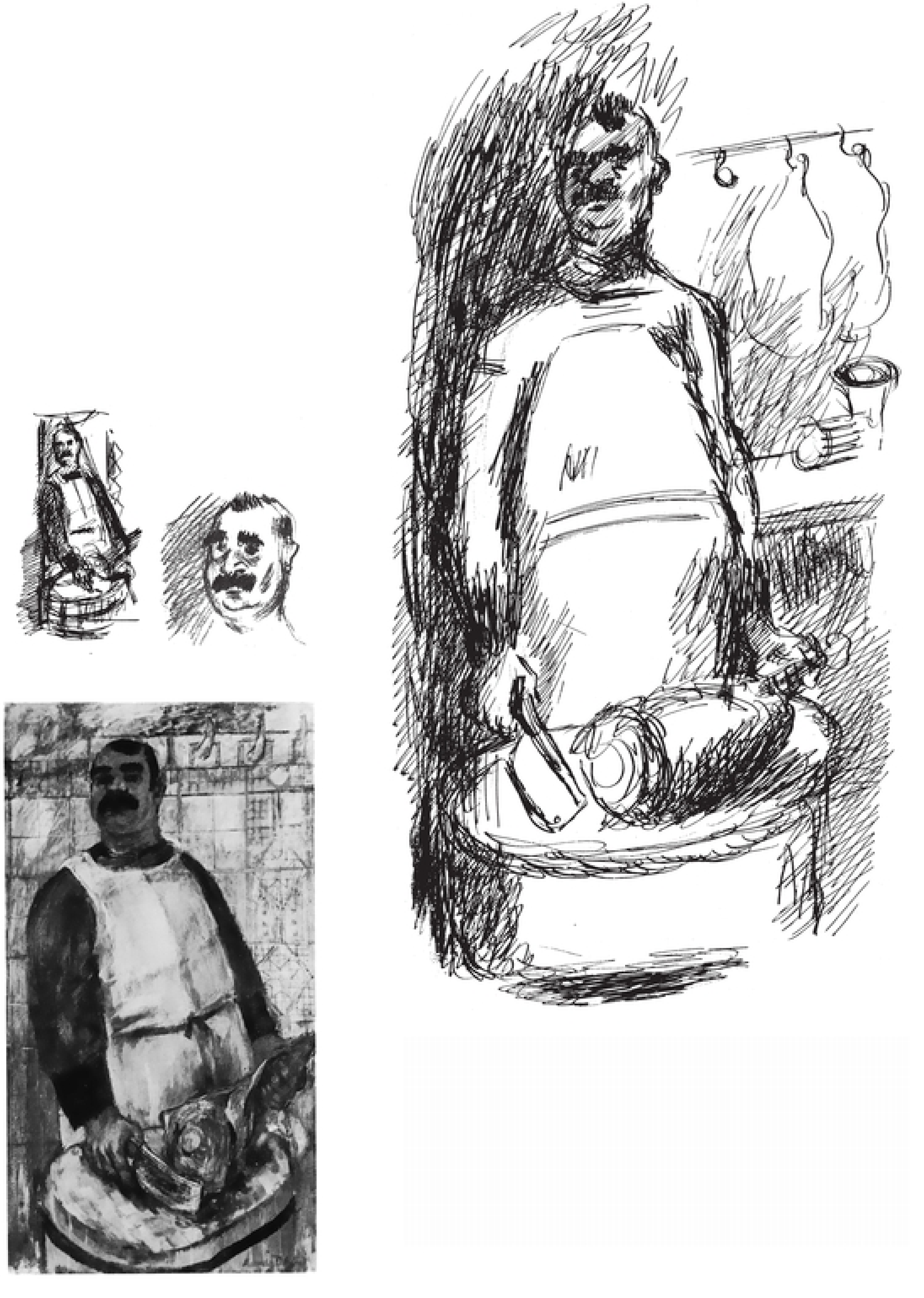




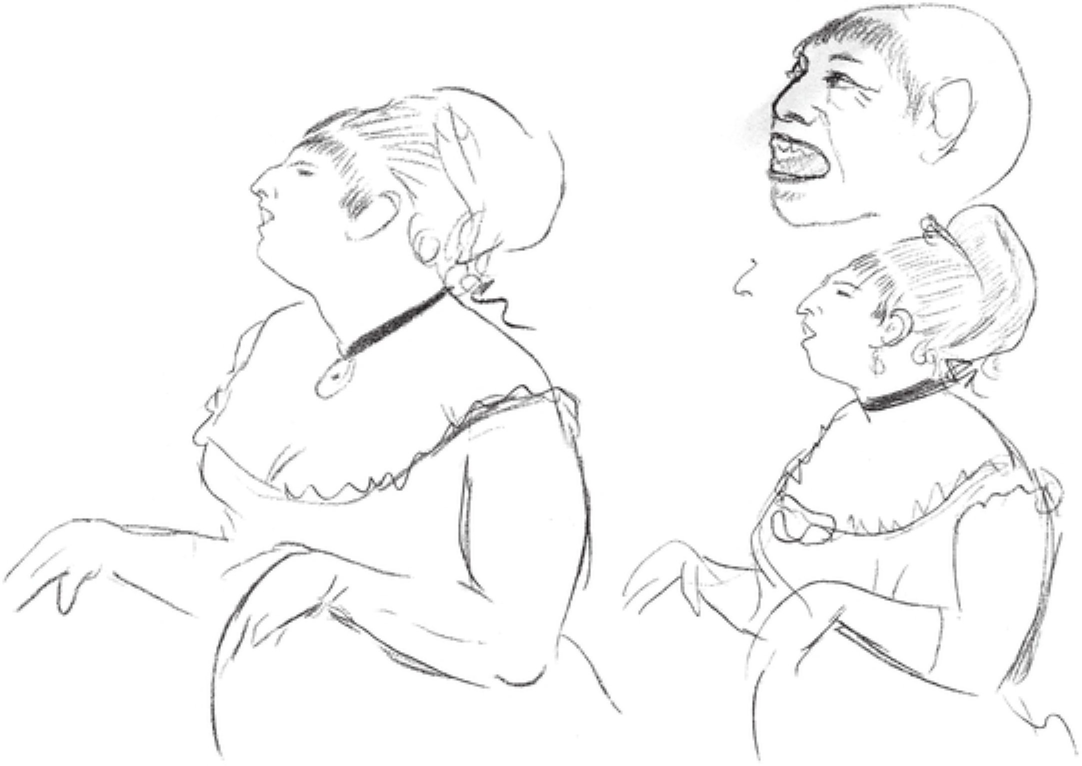


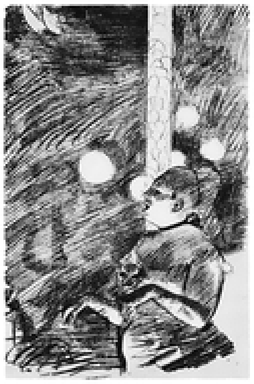


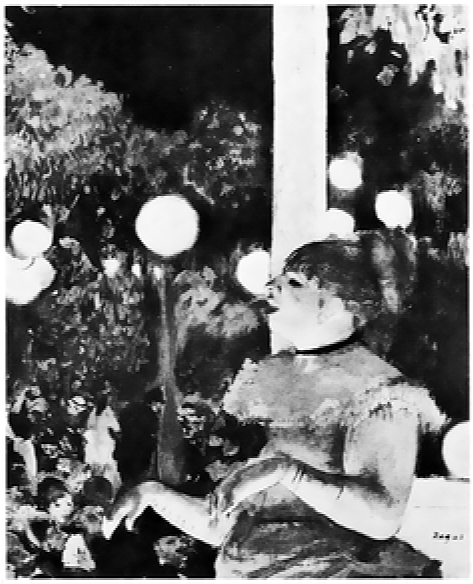
DOBKIN. Two of the many studies drawn for the painting below. The figure of a woman was eliminated in the painting. I thought the painting would gain by introducing instead a partly visible window, a vertical form, in back of the child.



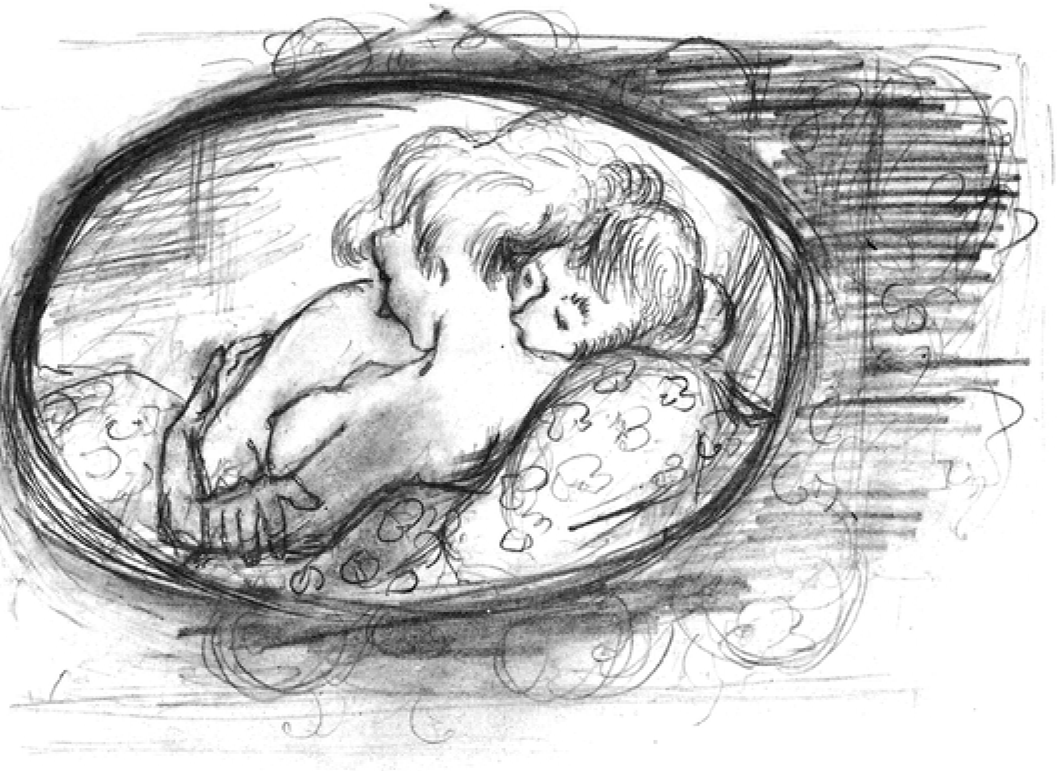
DOBKIN. Studies for "The Butcher." Although the painting itself was done without the model, many drawings were done from a butcher who was kind enough to pose for me in his shop.



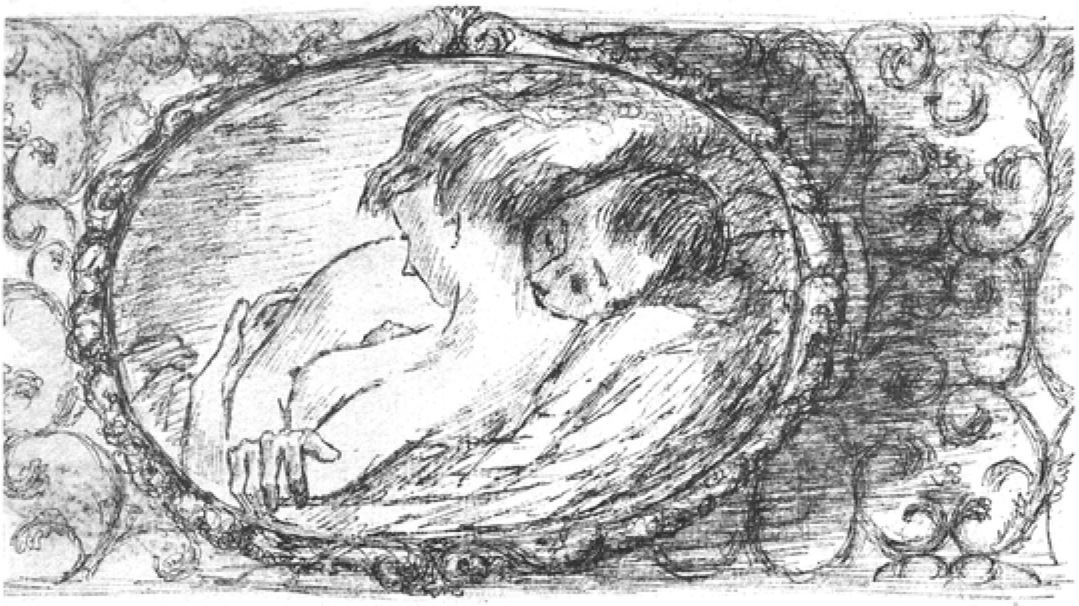


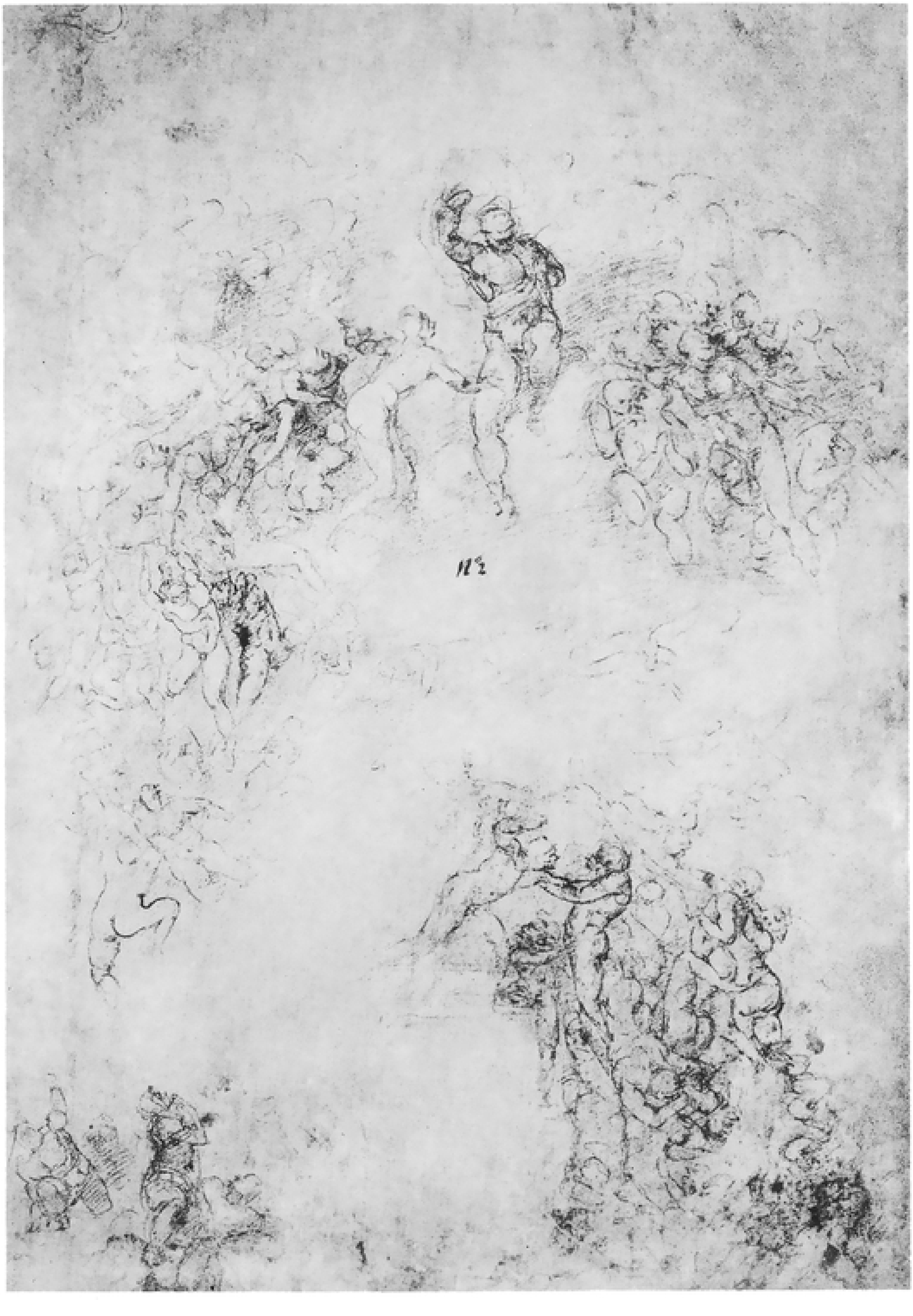


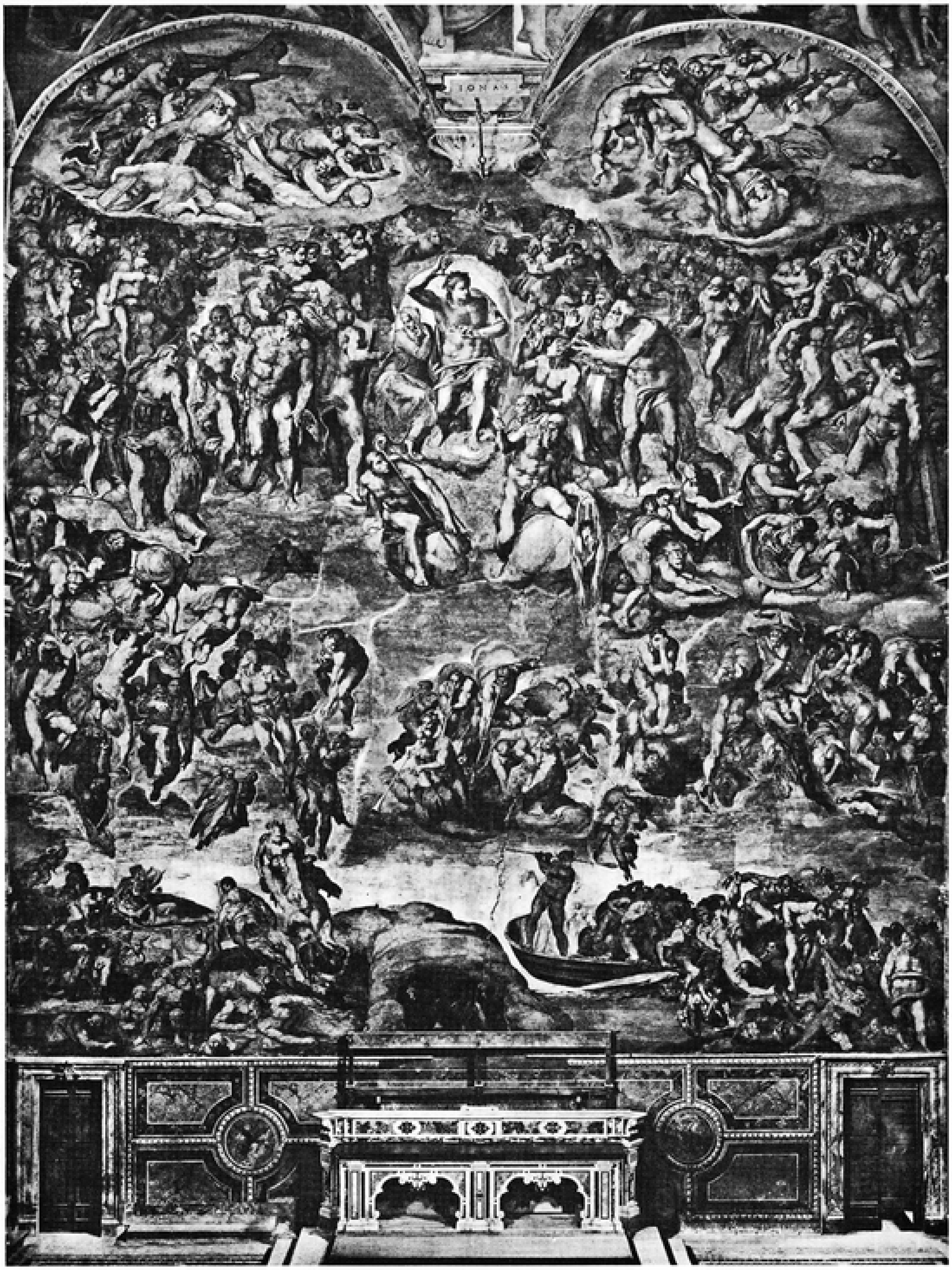
DEGAS must have had this subject in mind a long time. His first concept was a pencil sketch, then a lithograph, and finally the painting.



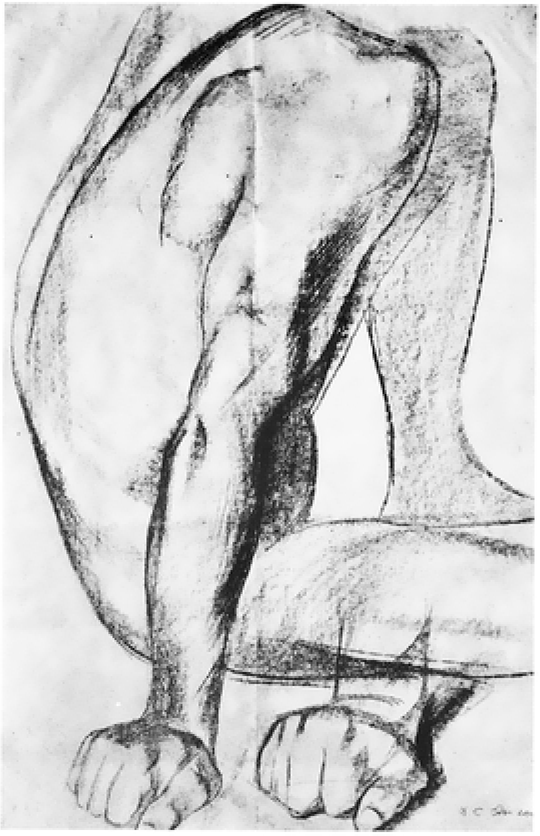
DOBKIN. Preliminary sketch and finished illustration for “Nana.”

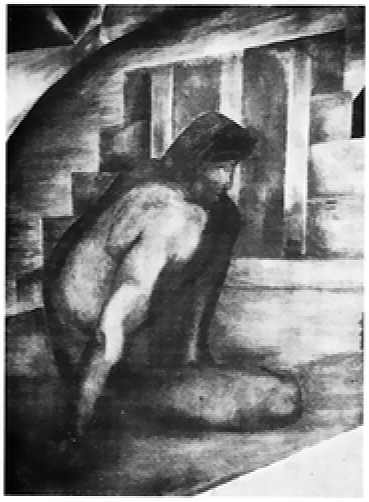




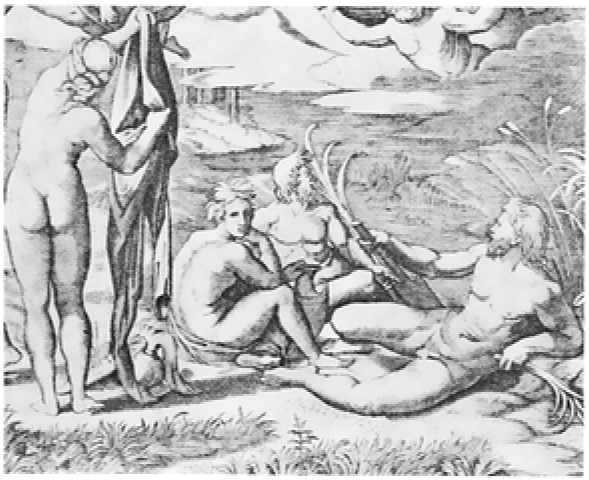


MICHELANGELO. No matter how large the problem, the beginning is always just a drawing. It is remarkable with what facility and self–confidence Michelangelo jotted down (left) the various groupings for one of *the largest murals in the world, “The Last Judgment,” on the Altar-Wall of the Sistine Chapel in Rome.*





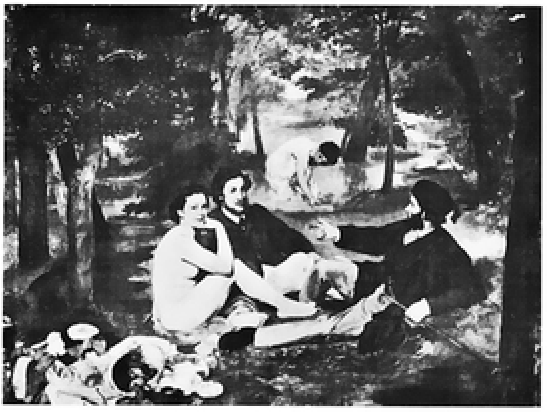
OROZCO. Study by José Clemente Orozco for the mural above.



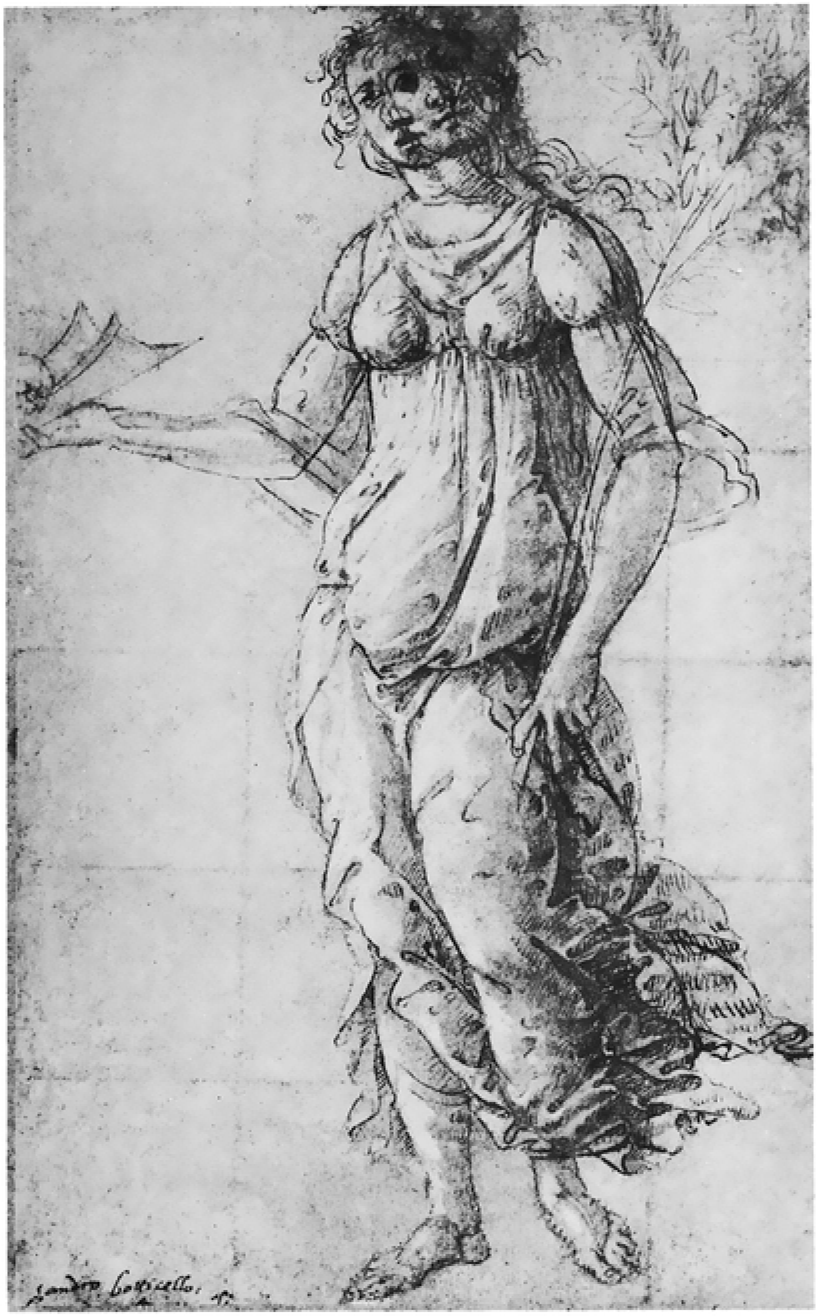
MARCANTON

The validity of copying a master's work has always been questionable. Generally it should be discouraged. But if it helps materially in solving a problem, if there is a purpose other than merely reproducing someone else's work, copying may be of some help.

Even masters copied. Below is a famous painting by Manet which bears a strong resemblance to Marcanton's engraving after Raphael.



MANET



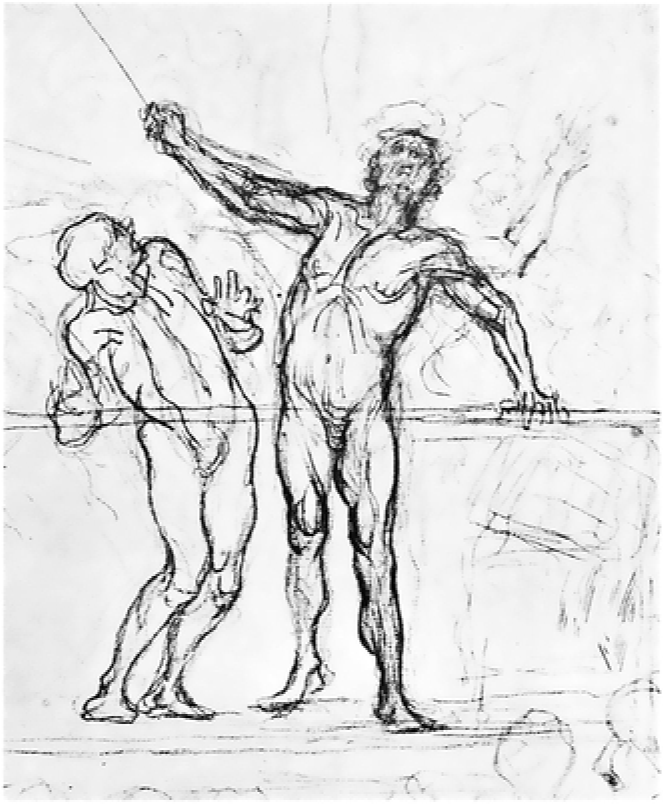
BOTTICELLI. A critic once asked Gauguin if he could see his drawings. The reply was: "My drawings? Never. They are my letters, my secrets."

That is how many artists feel about their drawings. They are their personal property, not for sale. And that is why drawings become of interest to collectors and students. Where but in a drawing could you find a double-faced girl by such a careful artist as Botticelli or the many-limbed figure by a "finished" draughtsman like Ingres! (See next page.)

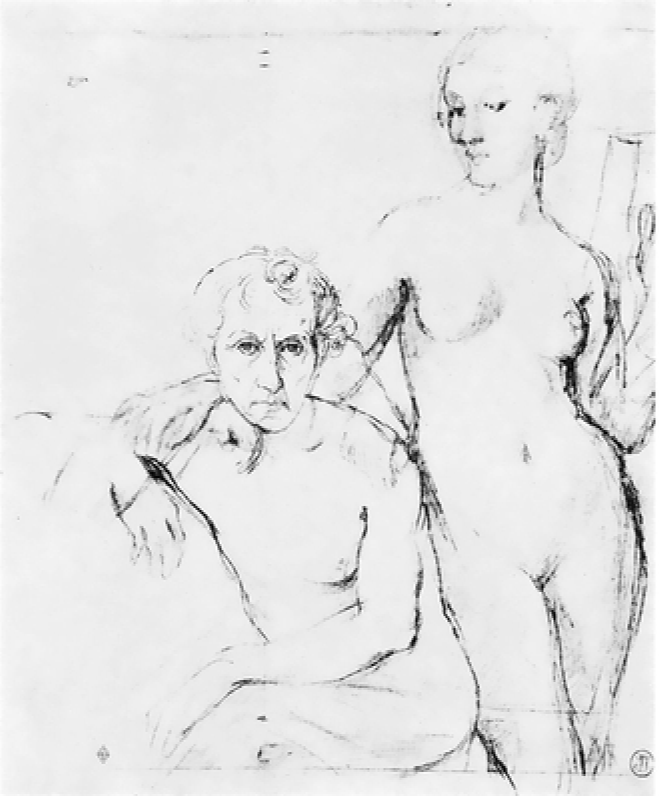
The reason for such intimate designs is that no great artist ever ceases to be a student. No amount of experience stops him from further experimentation. A master abhors erasures. He studies carefully every pose, every possibility. Is there a better way of judging a pose than by indicating many possibilities of its movement within one drawing? Obviously not. Therefore take a cue from the masters. Instead of erasing, leave the working lines of your drawings intact.

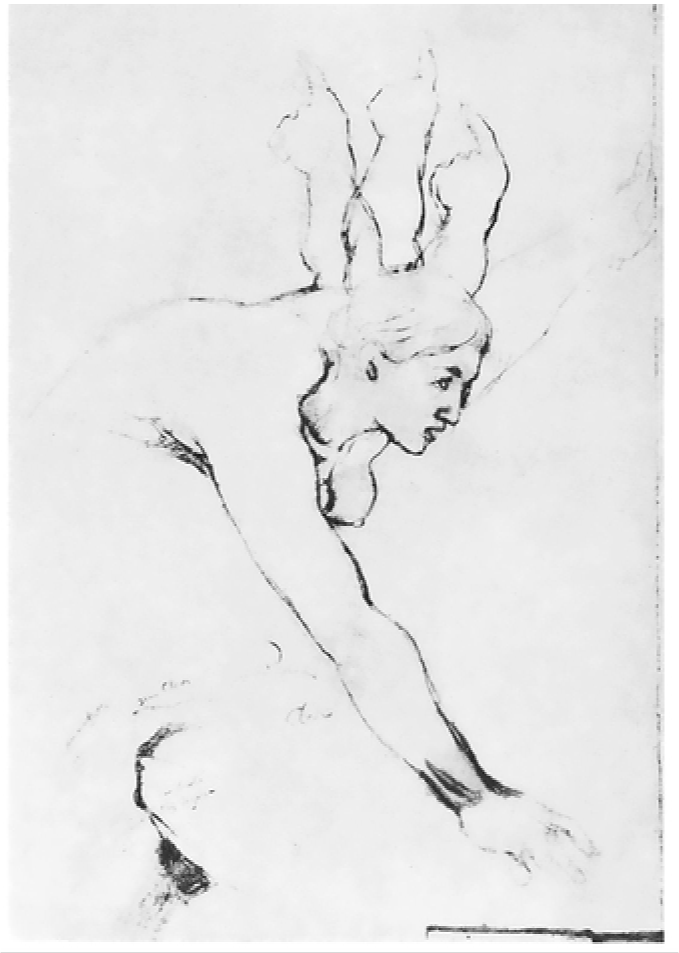
To many contemporary artists these studies have been an inspiration for new approaches to art. Perhaps Picasso's "double image" paintings are direct descendants of this kind of drawing.

DAUMIER

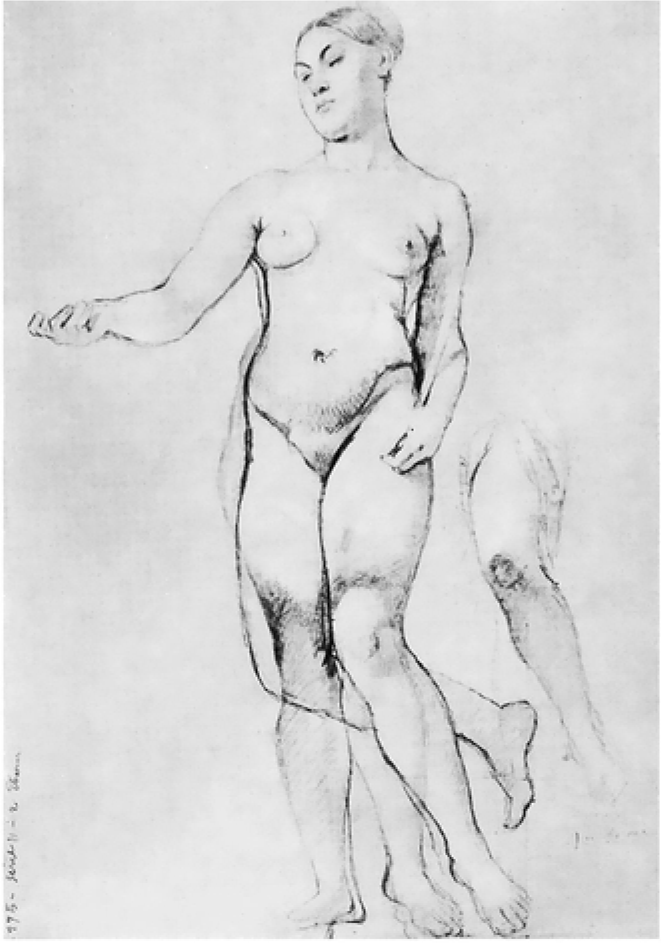


INGRES

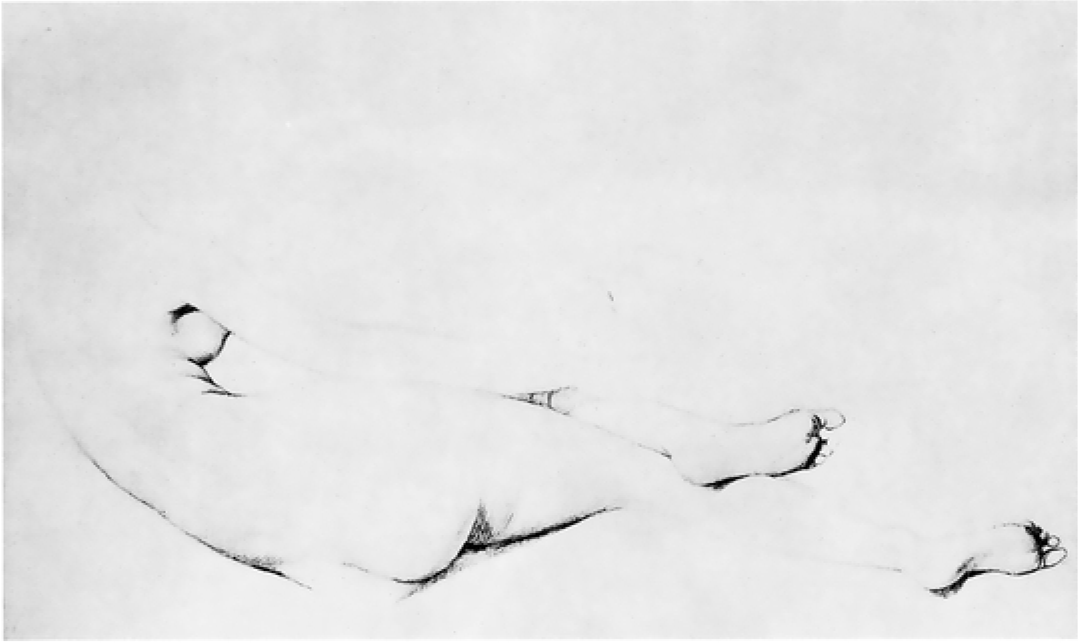


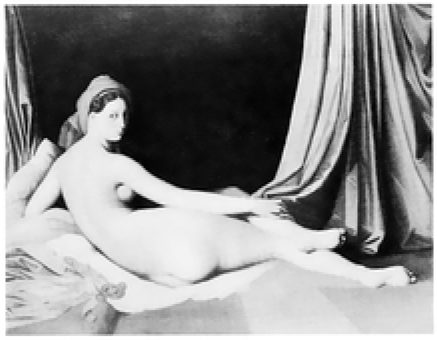


INGRES



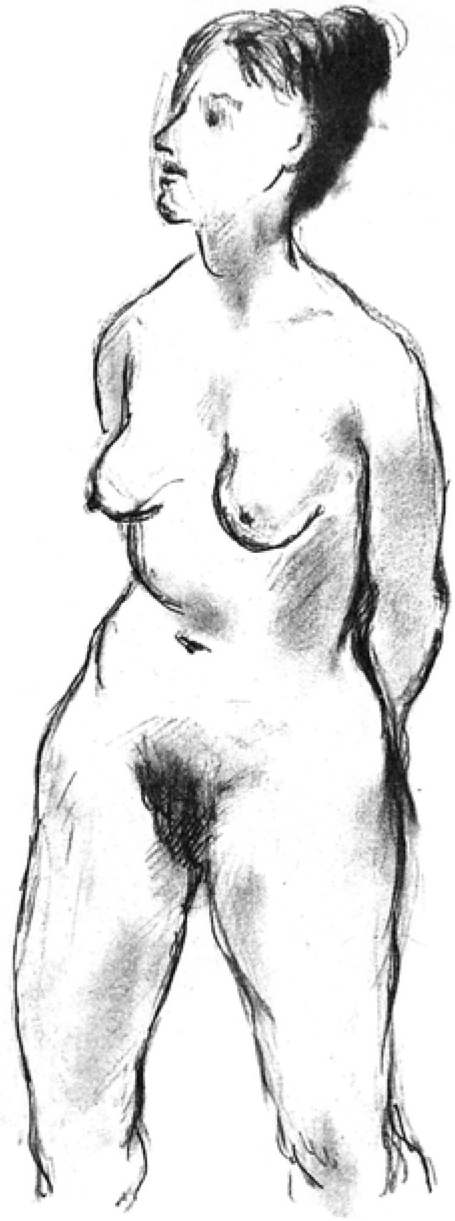
INGRES

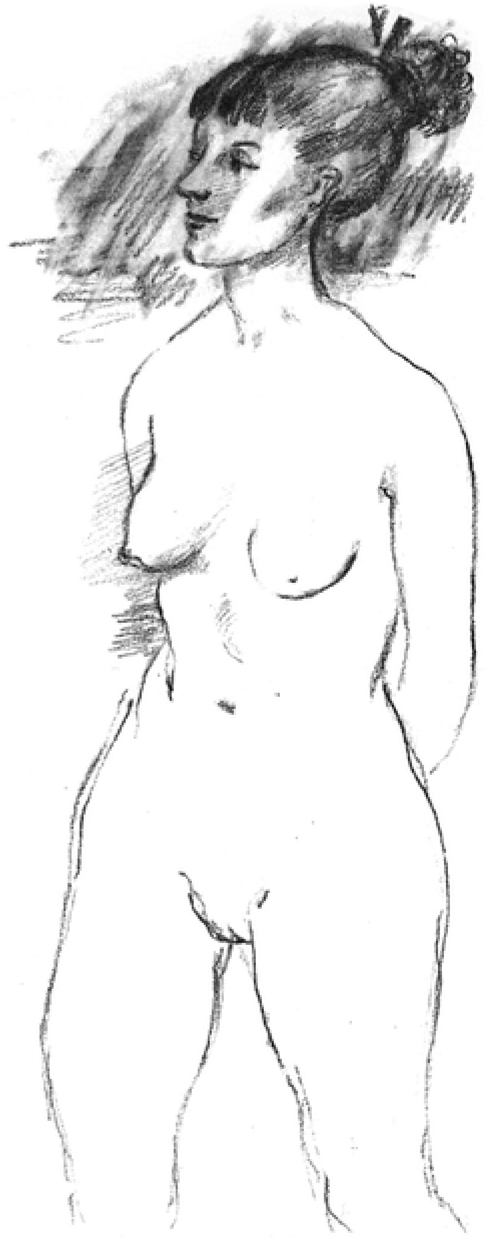




INGRES. Some artists will work in different ways at different times. Unlike his work on the opposite page, Ingres in the drawing above employs a method which I call “finishing one part at a time.” There is something cool and objective about this drawing. He is not interested here in trying many different movements within the same drawing. He draws his reclining nude as if all the possibilities were already tried and solved, as if he is now ready to make a faultless image. He approaches the job in a novel fashion. Here and there some parts are finished completely while others are hardly touched. The result is quite striking. The finished parts create a definite and a planned pattern. The placement of the dark parts is masterful, not only in relationship of one dark part to another but also in the relationship of these parts to the entire white background.

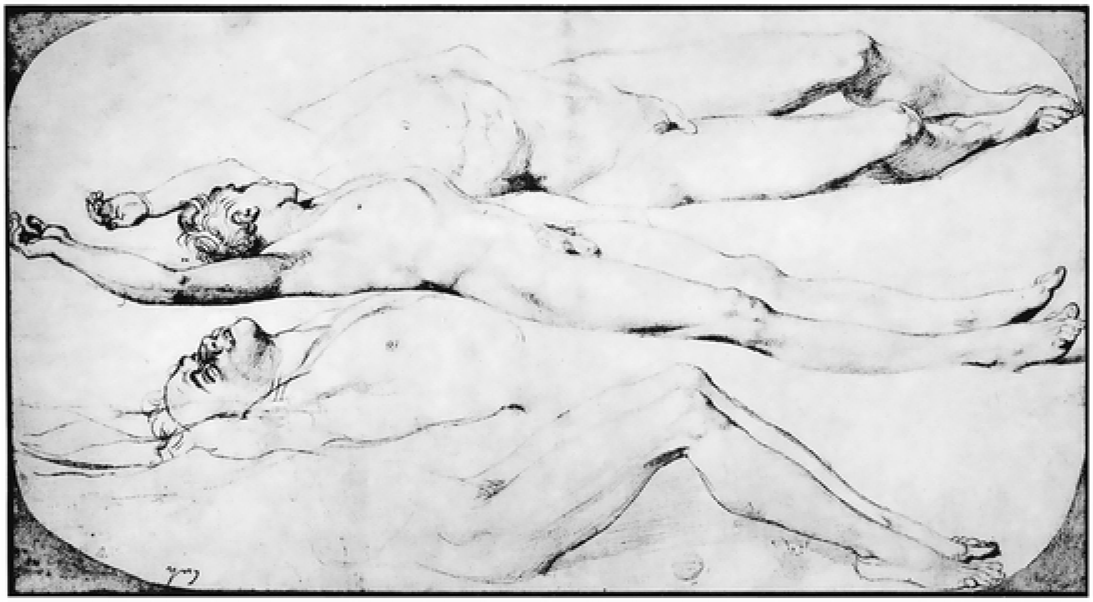
The complete figure (right) is Ingres’ painting after the drawing.



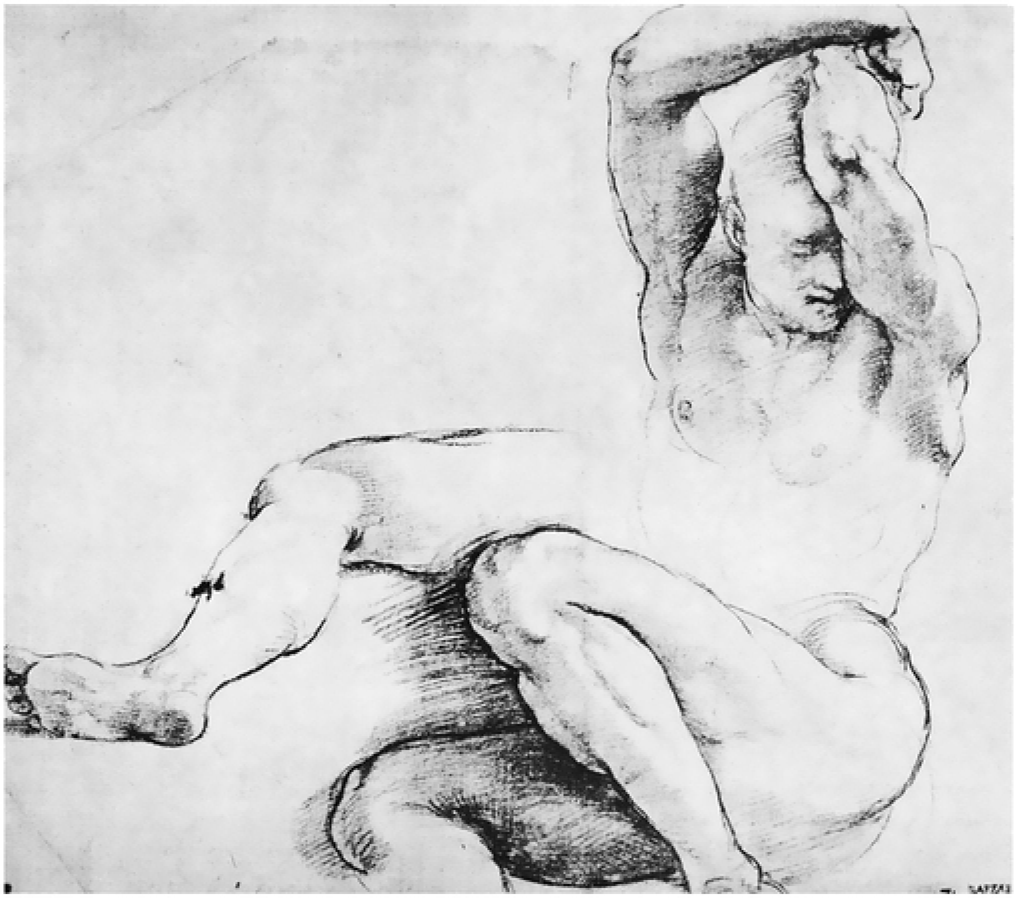


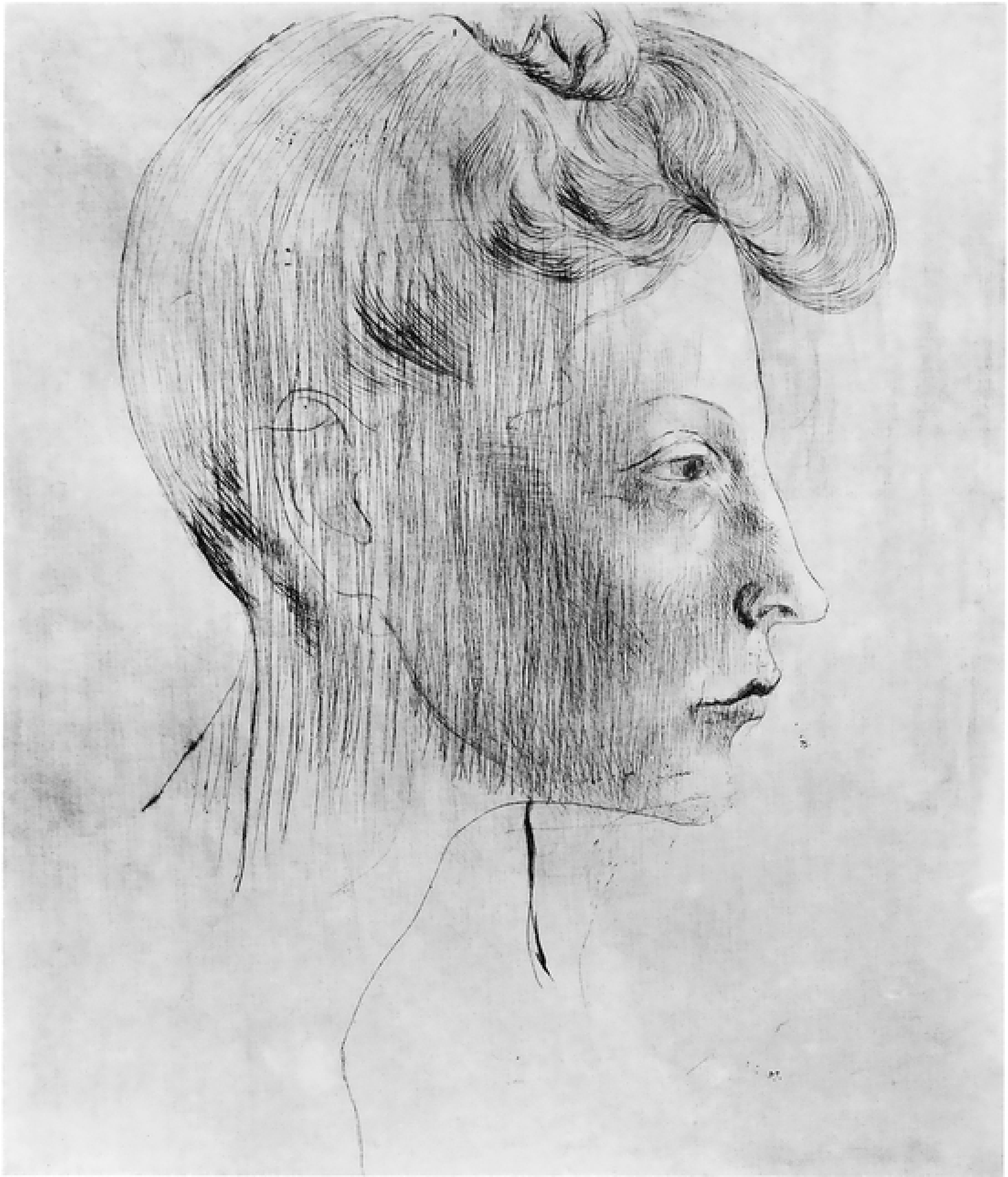
DOBKIN. All parts of this drawing are being finished at the same time. Hence it possesses uniformity in all stages of its development.

Here the head is obviously much further along in its development than any other part of the body, This approach to drawing I call "finishing one part at a time."



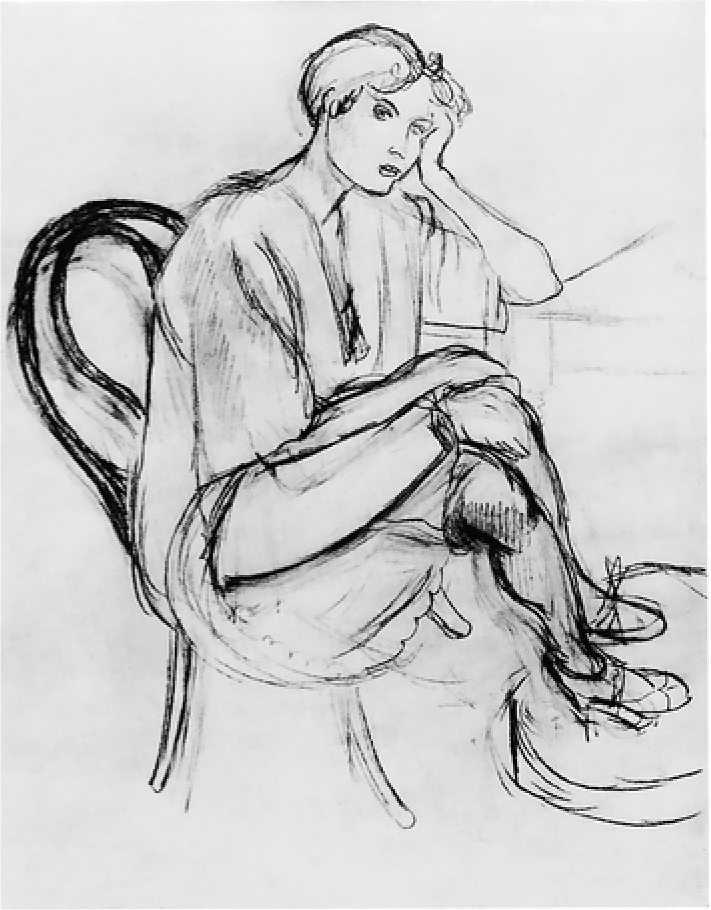
INGRES



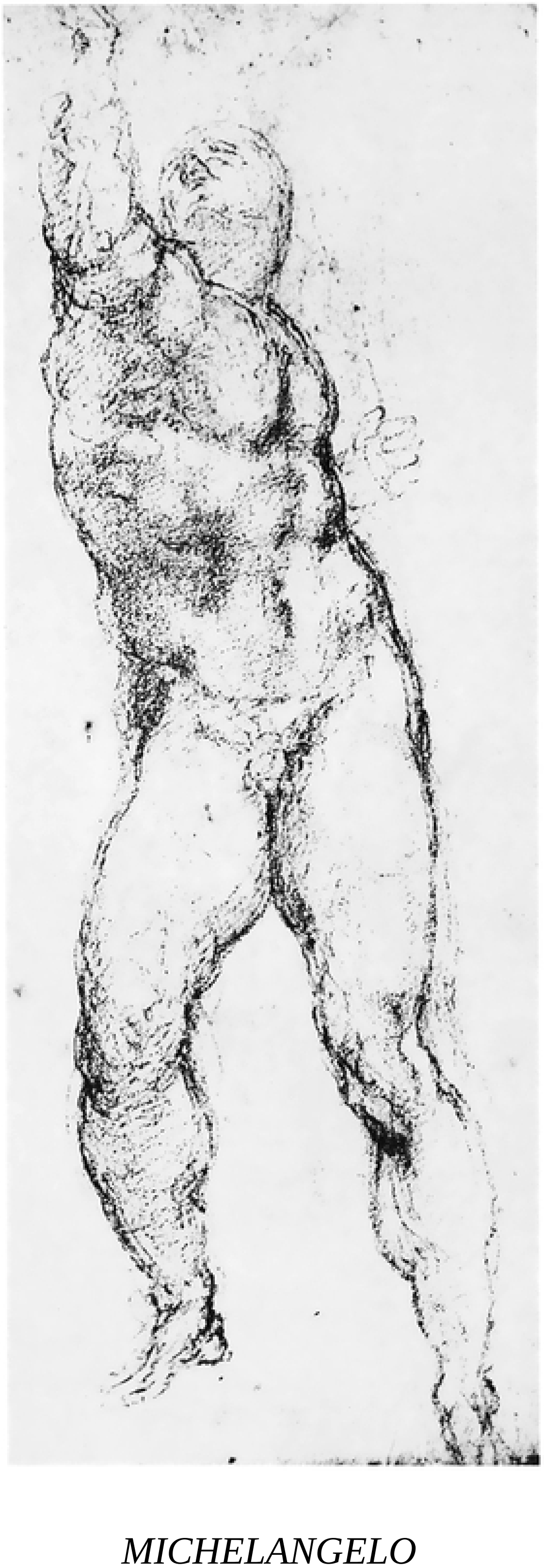


PICASSO. This etching is done as if the artist felt every form as he sketched with his needle, as if one line gave rise to another, as if the whole image emerged gradually. The two different directions of the neck are left intact as if the artist couldn't make up his mind which one he preferred. This method I call "trial and error."

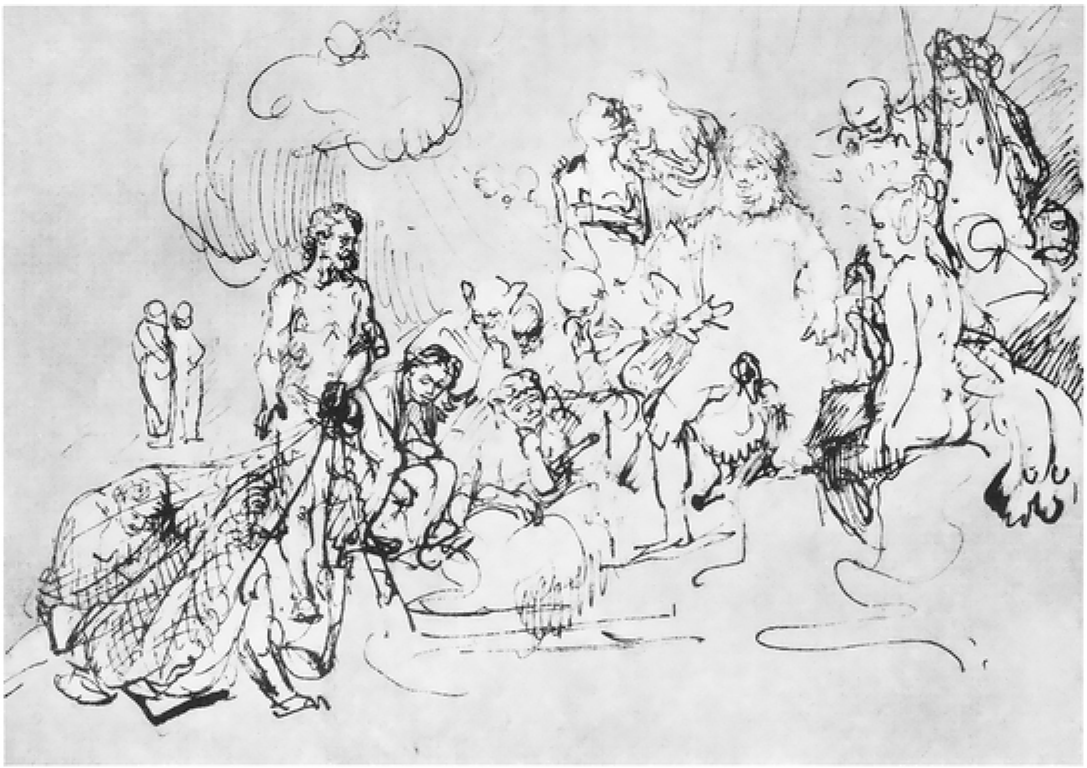
PICASSO



MATISSE



MICHELANGELO

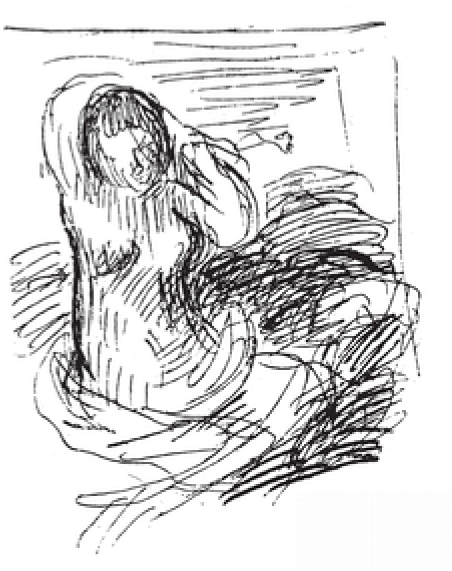


REMBRANDT

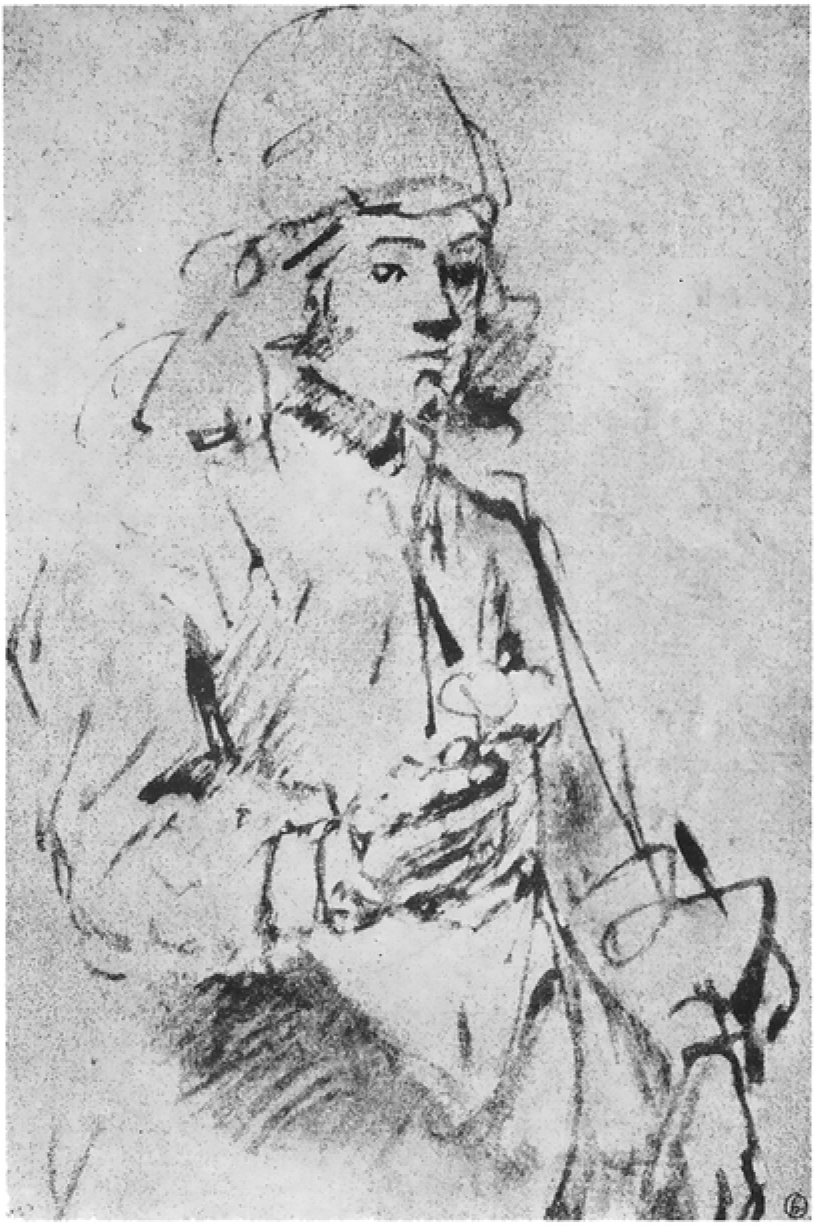
A nervous sensitivity dominates these drawings. This is a characteristic of all designs that are built up stroke by stroke. Every additional line adds a greater meaning and explains the forms more fully.

DELACROIX

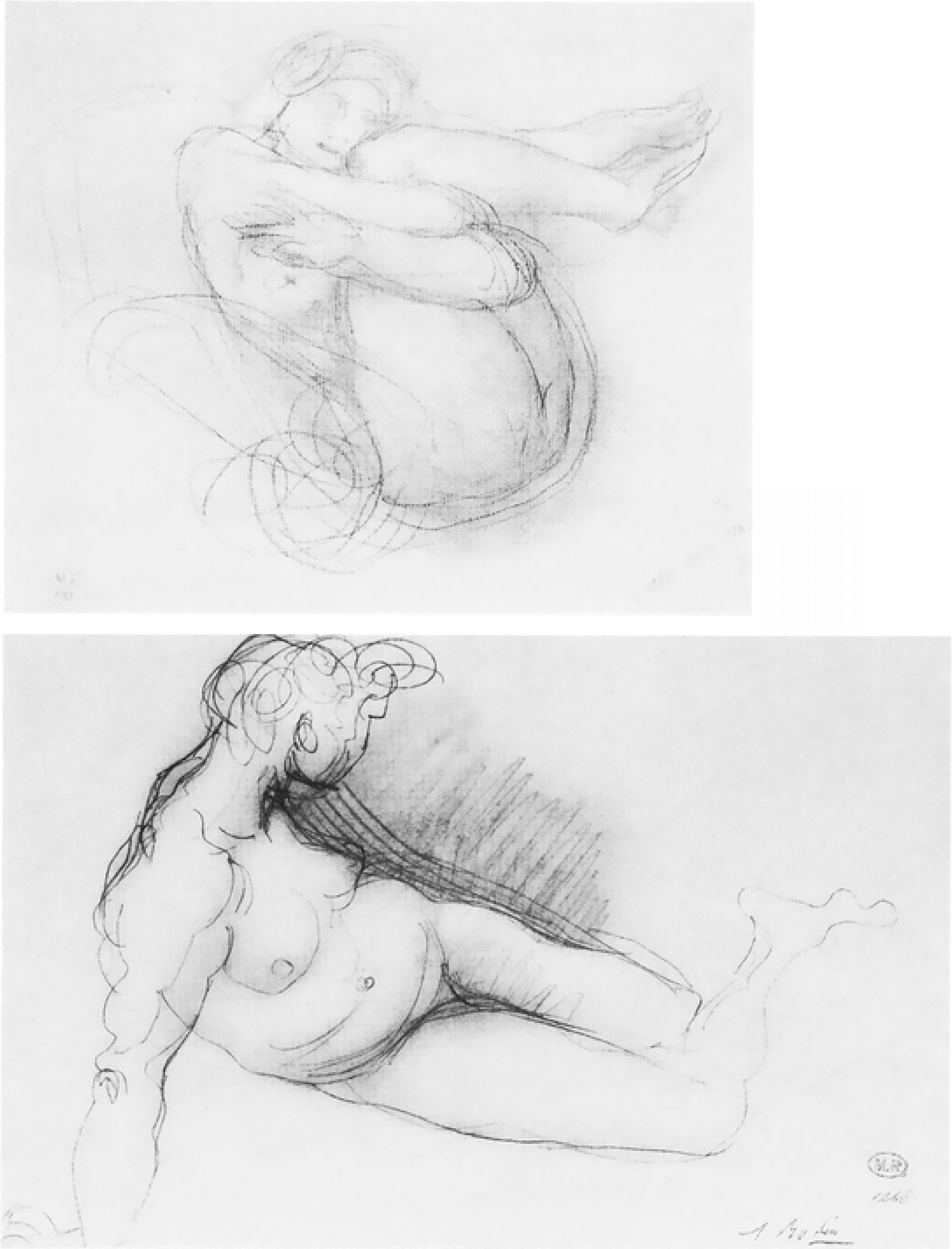
REDERER



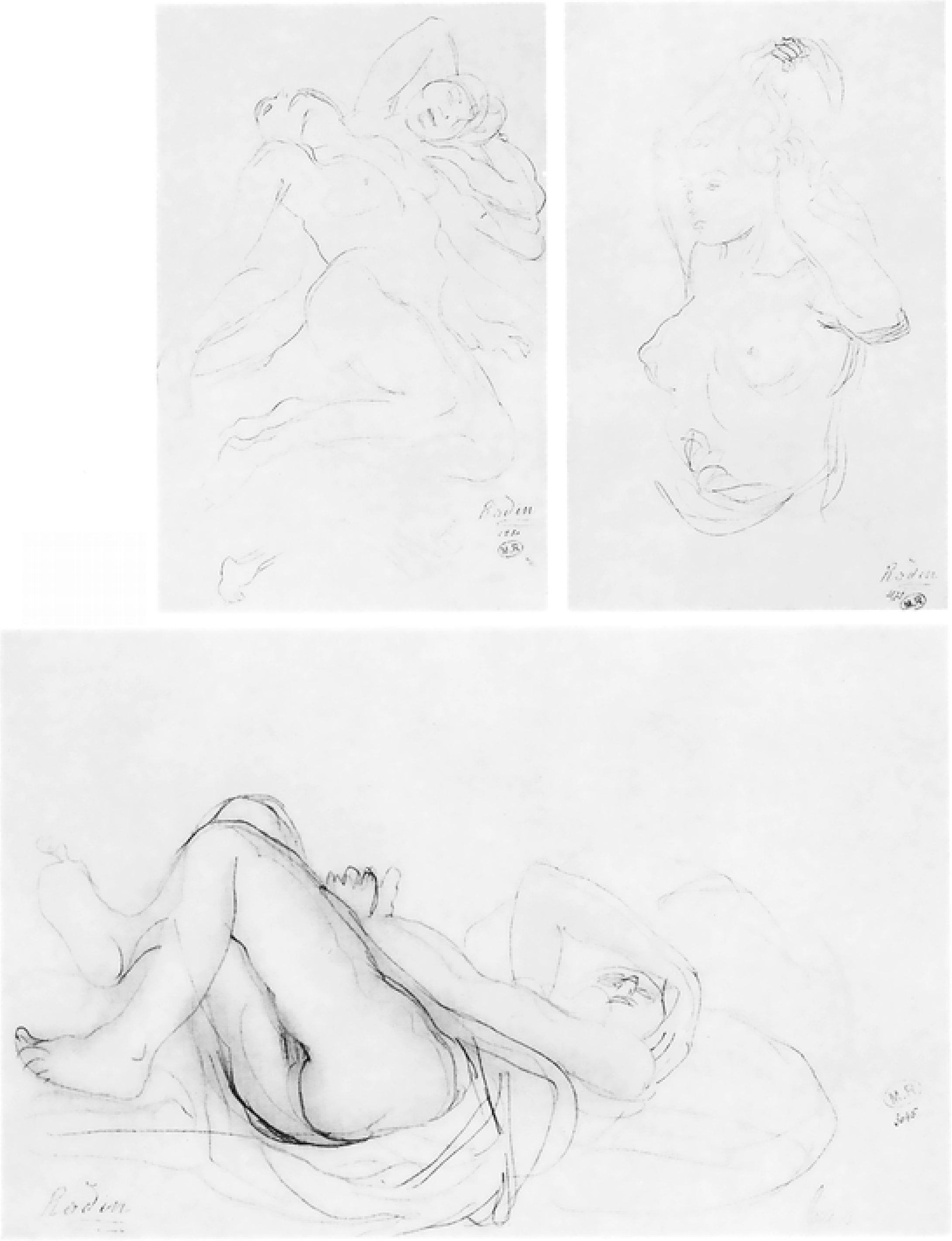
RENOIR



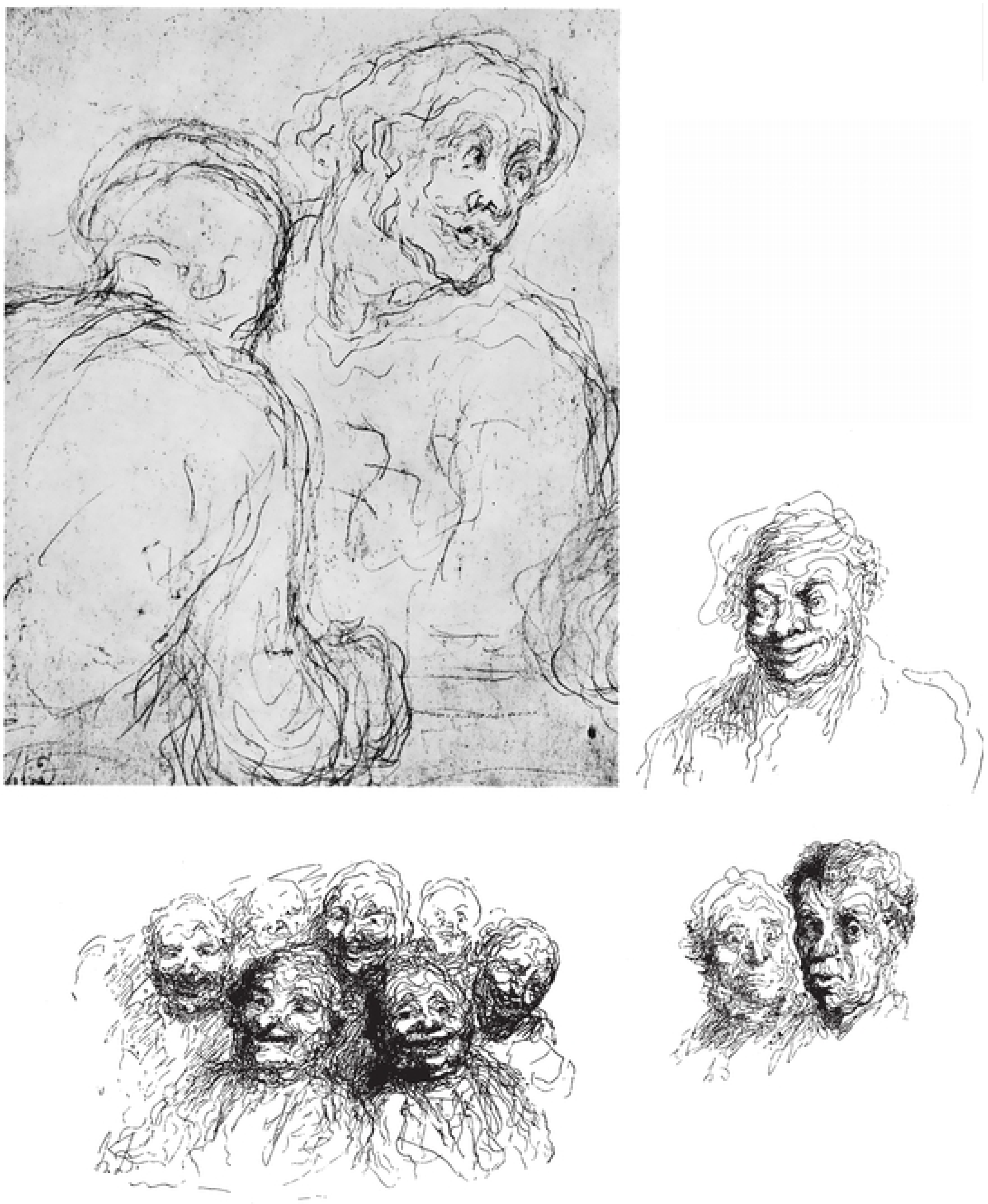
REMBRANDT



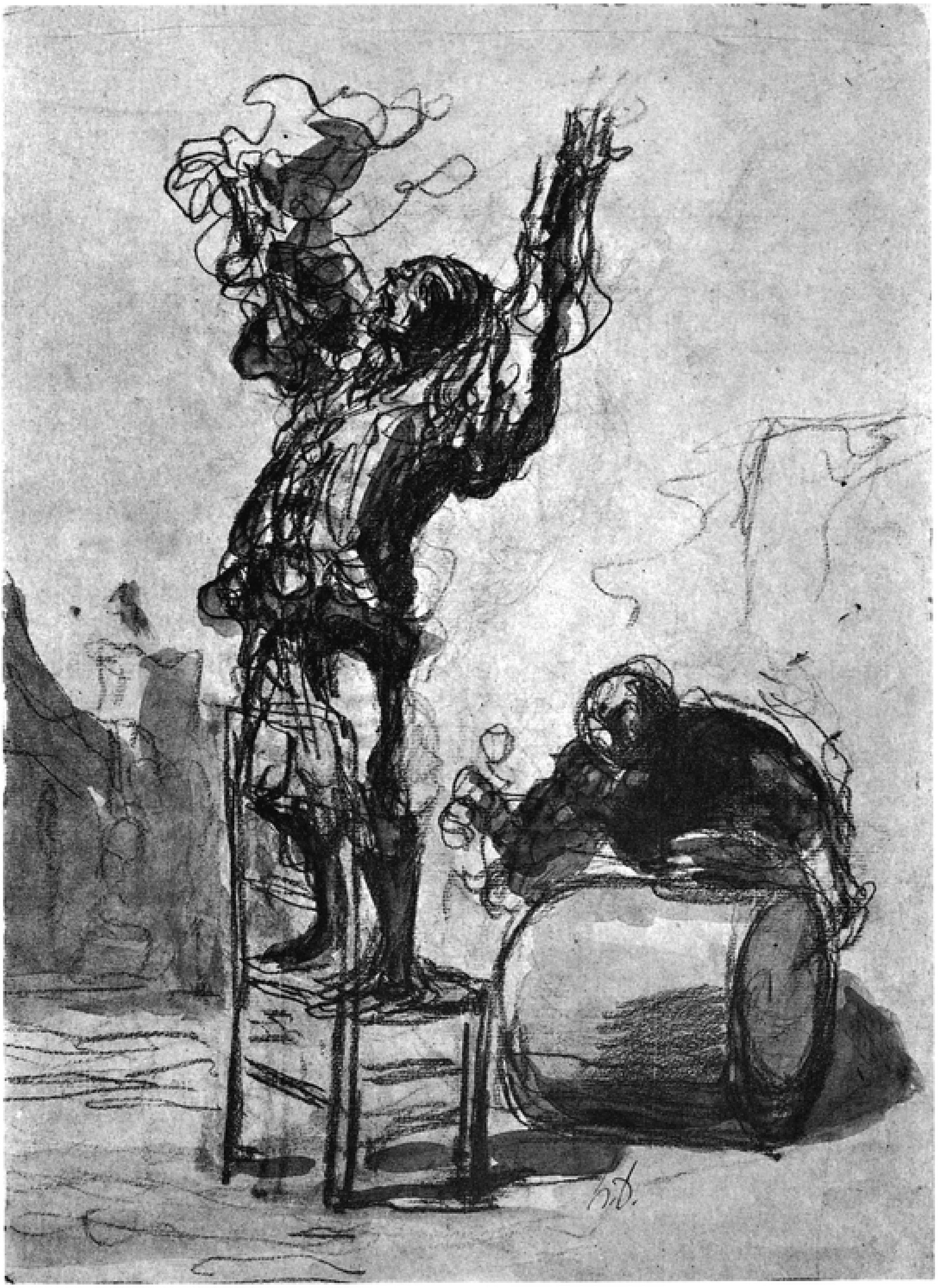
RODIN


Rodin
M.R.
Rodin
M.R.
Rodin
M.R.

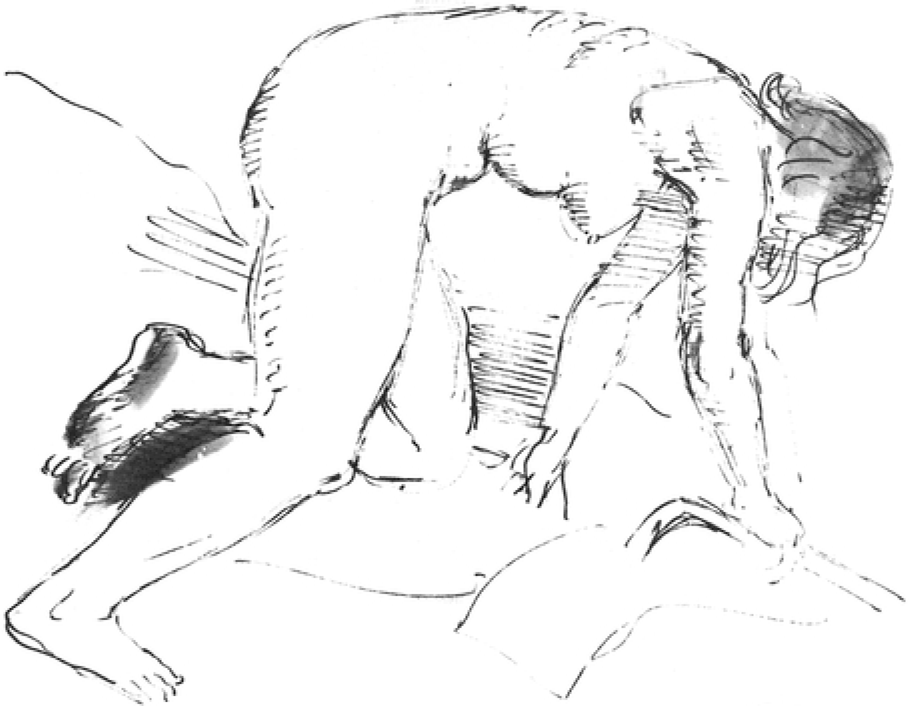
RODIN

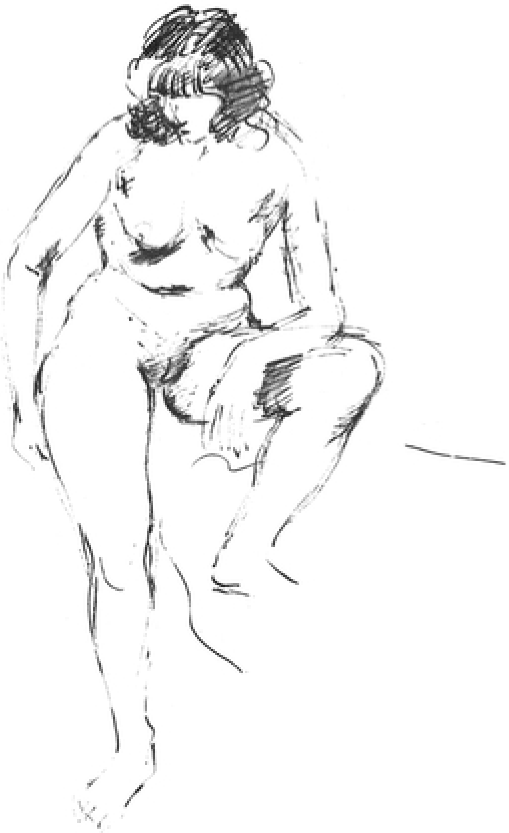


DAUMIER. It is fascinating to see how Daumier builds up his figures by numerous nervous lines. In the composition showing six faces, we actually see his process of building up the heads. In the back, two faces are indicated faintly, merely suggested. In front we see what happens as he works. The heads assume clarity, solidity, and life.

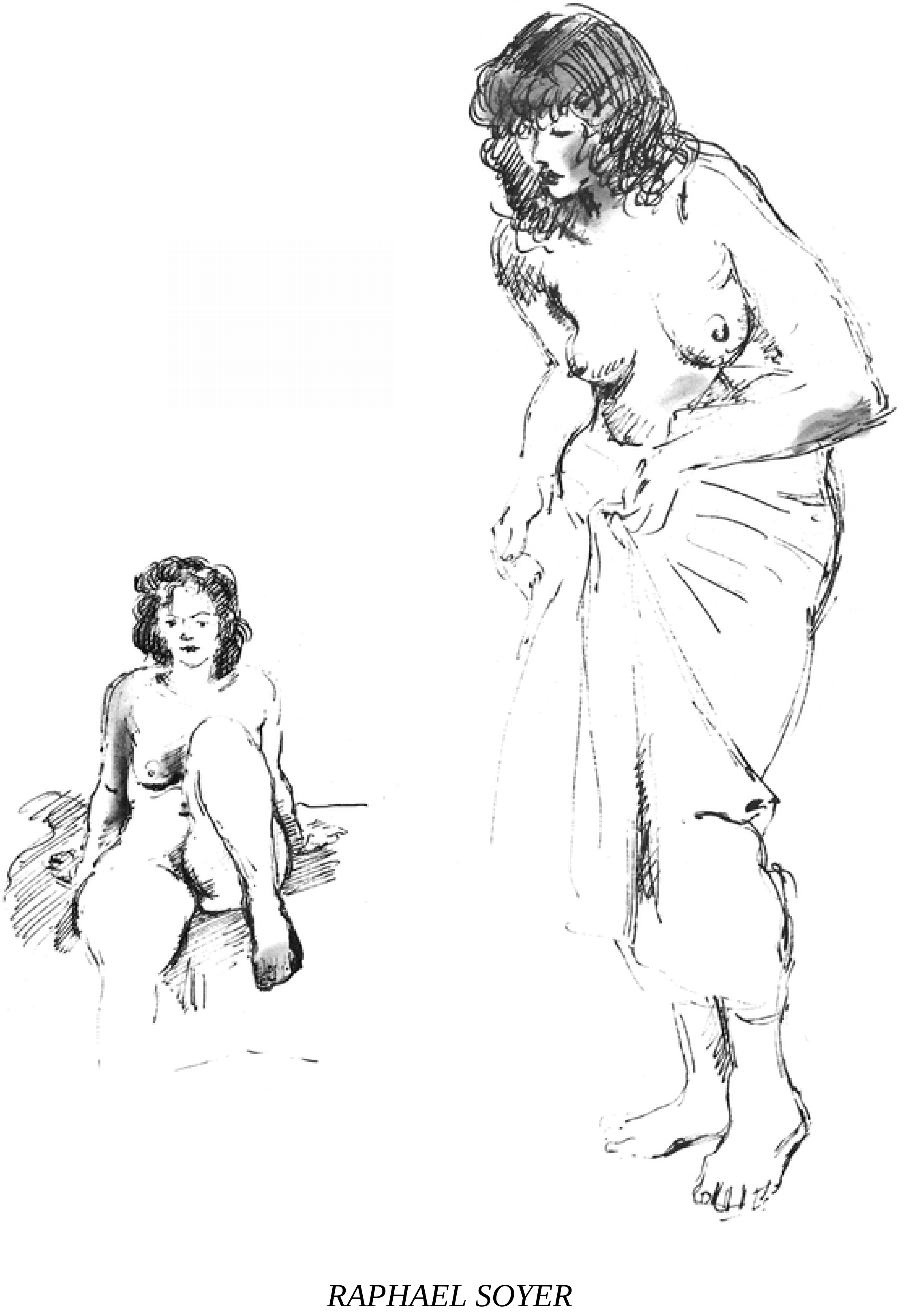


DAUMIER

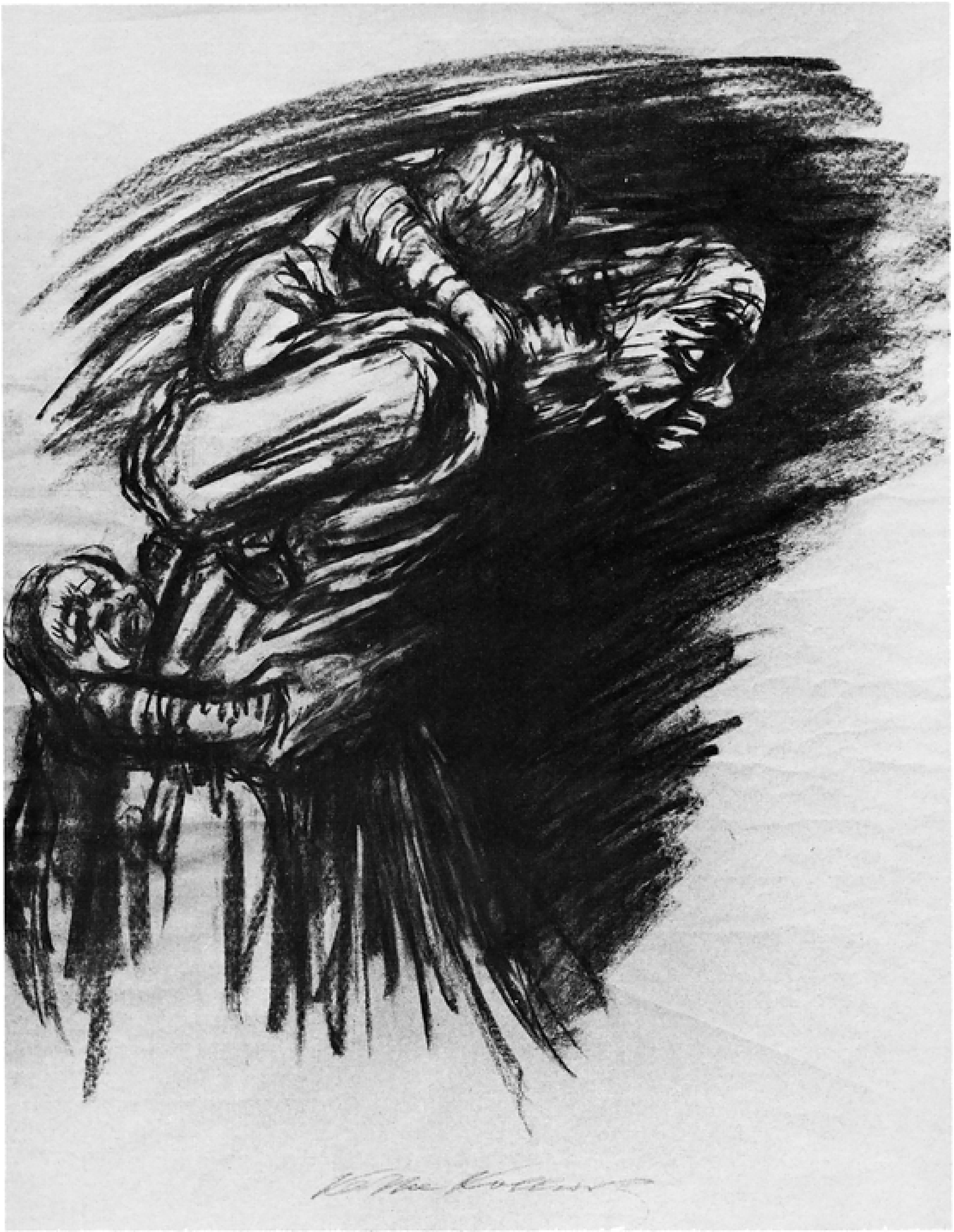




RAPHAEL SOYER

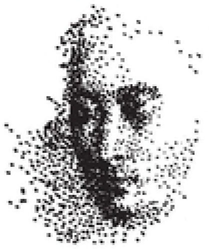


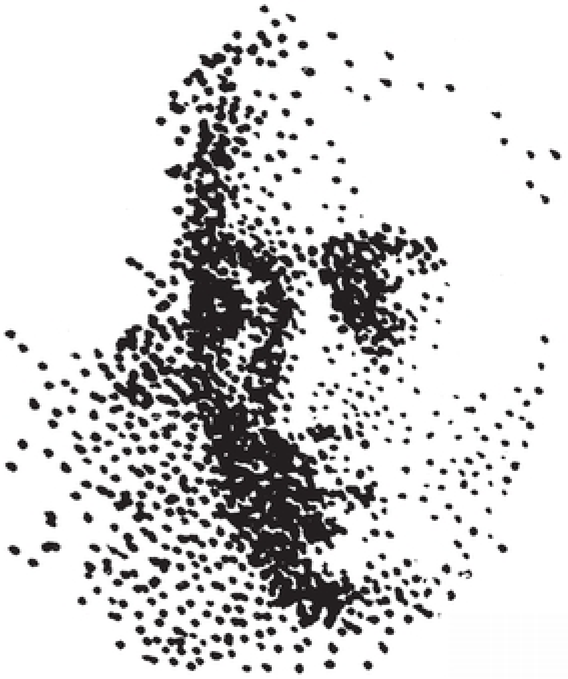
RAPHAEL SOYER


Käthe Kollwitz

KOLLWITZ. Charcoal drawing

original size



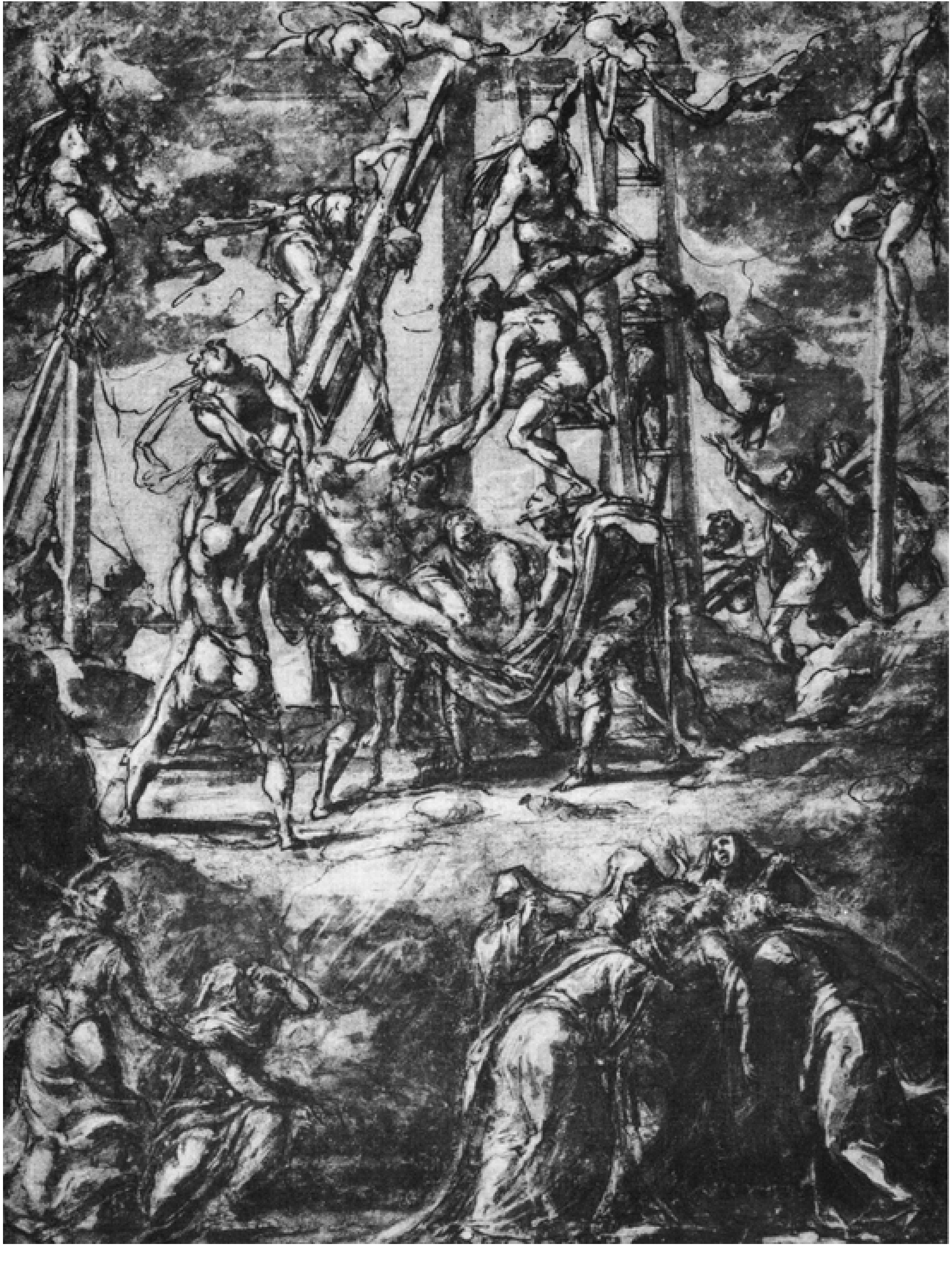


enlarged

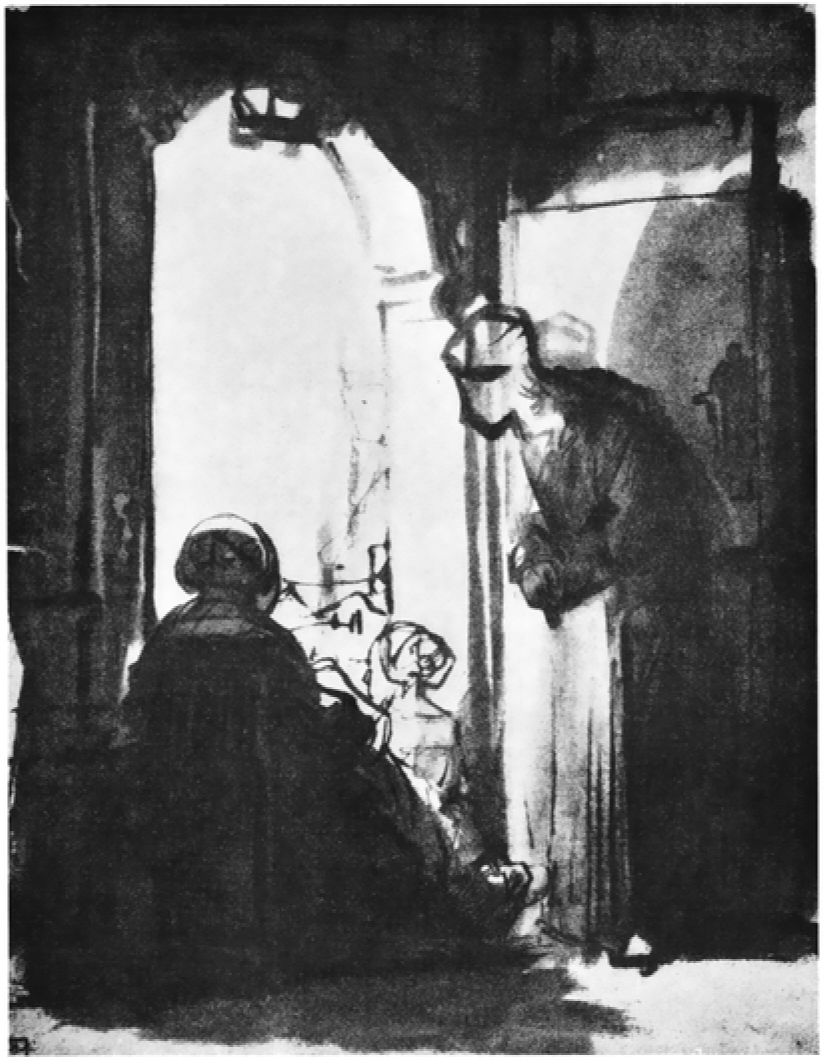
LEVINE. *There is something artificial about trying to classify every work of art, whether it be a painting, a drawing, a book, or a musical composition. All creative activity defies classification, because there exists no purity of character, nor definite line of demarcation between one drawing and another. Most drawings contain some element of all the methods discussed in this chapter.*

Classification is a method of cataloguing things that bear some family resemblance. At best it is only an approximate way of grouping certain artists or art together. Thus Cézanne is not only a post-impressionist but an impressionist as well, and Beethoven, the composer, is a classicist as well as a founder of the Romantic school.

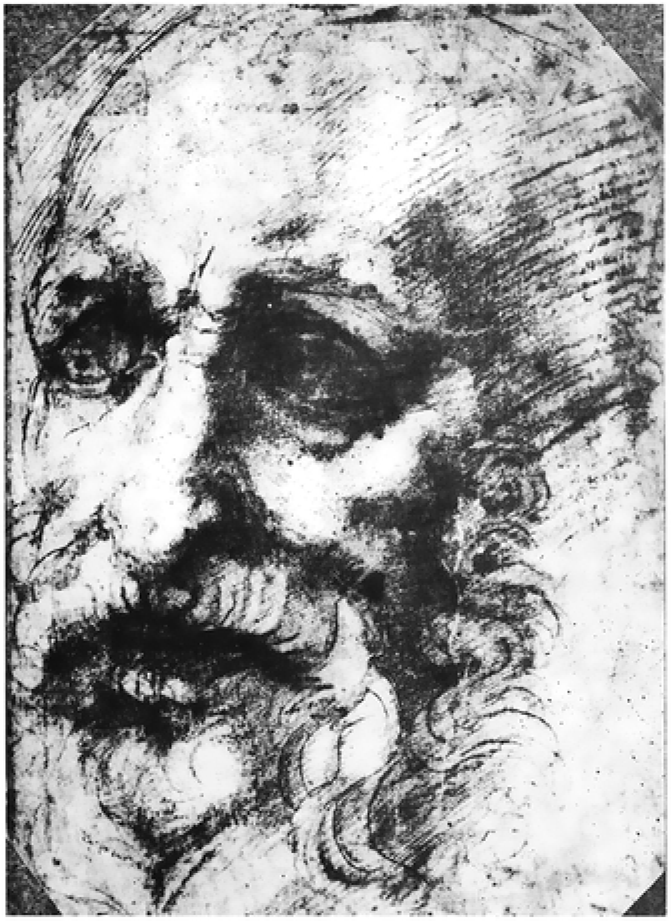
There can be no end to classification. What can one say about Jack Levine’s drawing above? Is it the “trial and error” type, is it contour, or what? It may be closer to the “trial and error” manner of expression, yet it is quite novel in its approach. The face is built up by many small dots—the method Seurat used in his paintings.



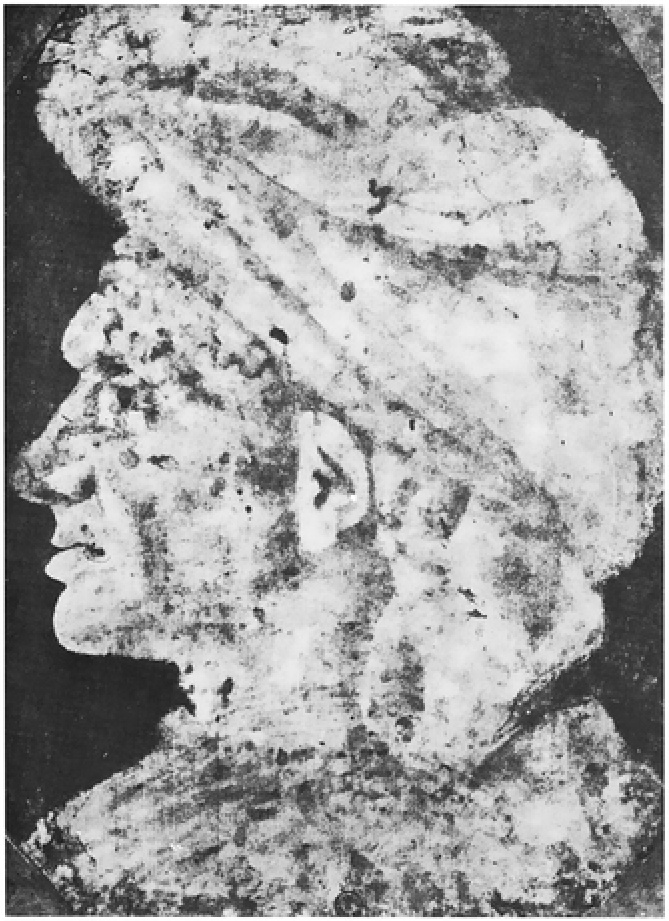
(LEFT) TINTORETTO'S studies for "The Descent from the Cross" are some of the most exciting drawings of all time. The relationship of darks and lights is truly masterful. At a distance it almost looks like a magnificent stained–glass window.



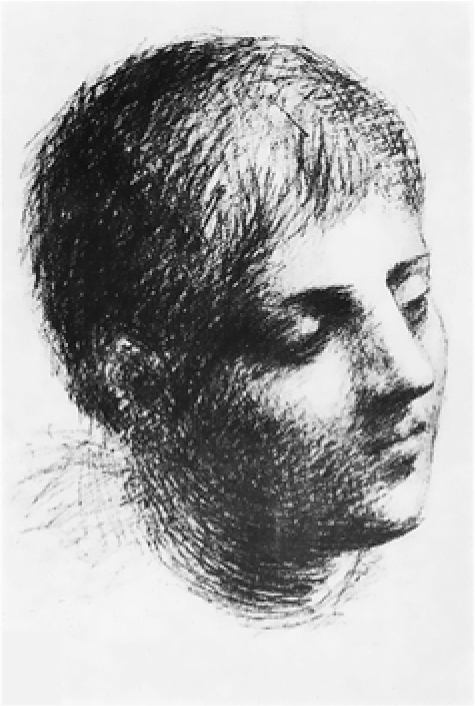
REMBRANDT is perhaps the greatest of all people's artists. He loved to paint people in their daily surroundings. This drawing is remarkable not *only because it depicts so warmly what we see in our everyday life—two dark figures lighted by a stream of light pouring in from outside—but also because it is well designed. Notice that every dark and light area emerges as a definite shape, that each shape is different in form, that each form is related to another. The arch of the door, for example, is echoed in the dark shape of the sitting figure, while the standing figure and the shadow in back of it oppose the diagonal movement of the triangular form of the sitting figure. The standing woman, though a simple dark form lacking all detail, is a fully realized figure. The casual but definite indication of the head against the frame of the door adds much to the quality of the drawing. The linear concept of the head against a soft wash introduces a lively freshness to the entire sketch. Above all, there is nothing accidental in the design of the picture. It reflects Rembrandt's knowledge of and concern with composition, pattern, and design.*



MICHELANGELO



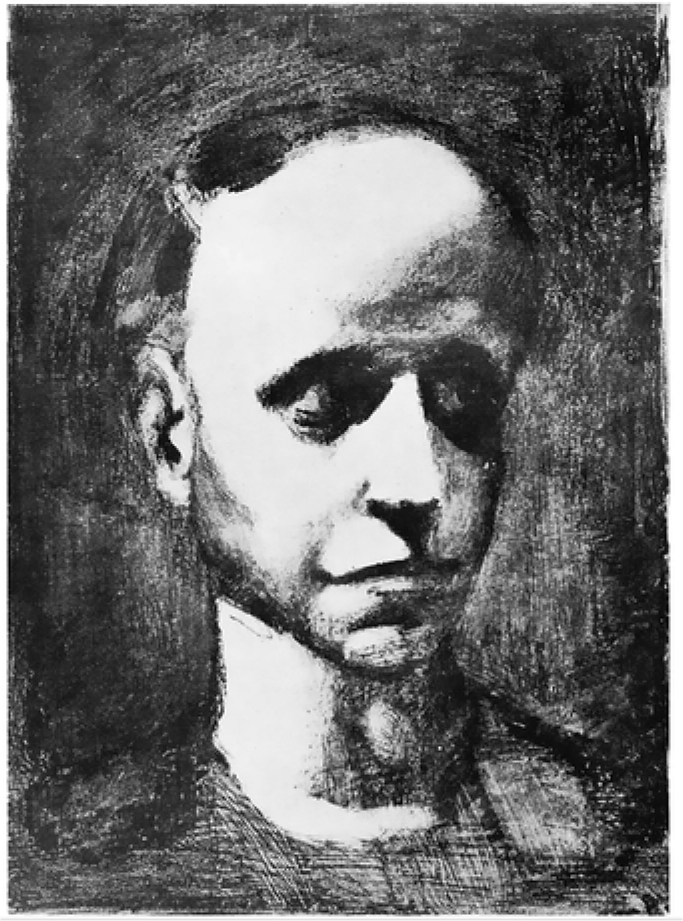
UCCELLO



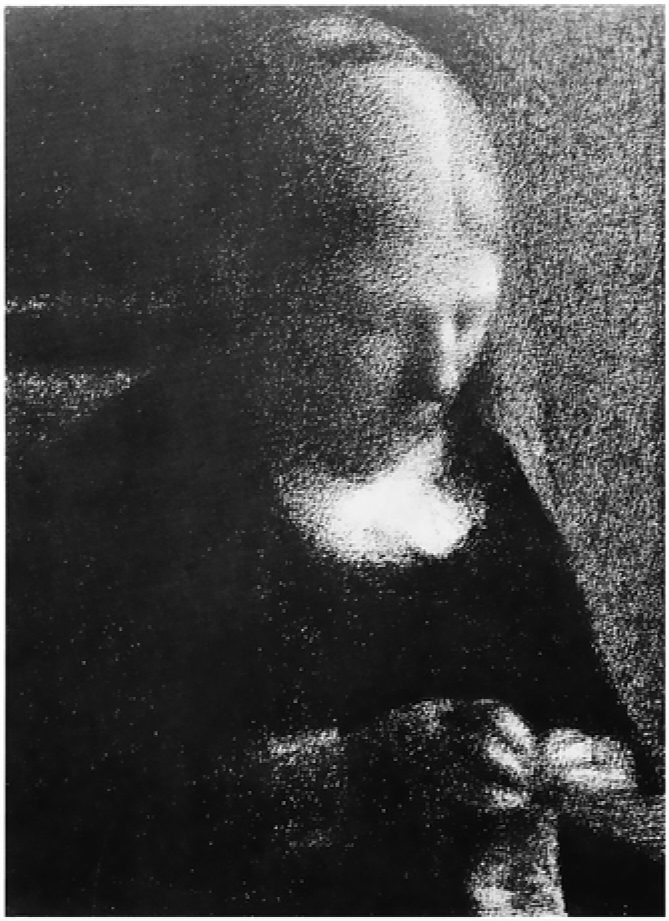
PICASSO

The European artist has contributed most to the concept of light and shade. It was he who developed into a science the study of how light affects natural forms (see p. 141). The Oriental and pre-Renaissance Italian masters preferred to portray nature as pattern, as flat ungraded surfaces beautifully related to one another.

Because shading has become an unimaginative and mechanical method of copying nature, many modern artists have rejected it altogether and have returned to the earlier concept of flat pattern. But as the drawings on this page show, shad- ing when used creatively can become the means of achieving striking and unusual effects which add power and emotional quality to a picture.

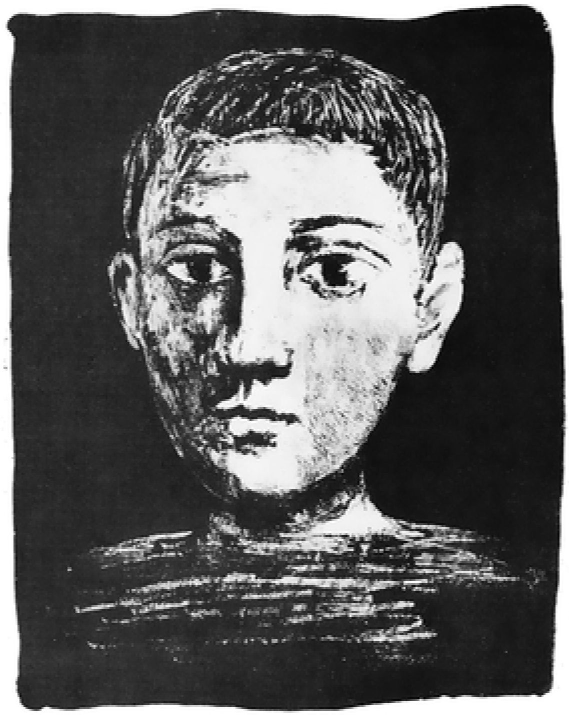


ROUAULT

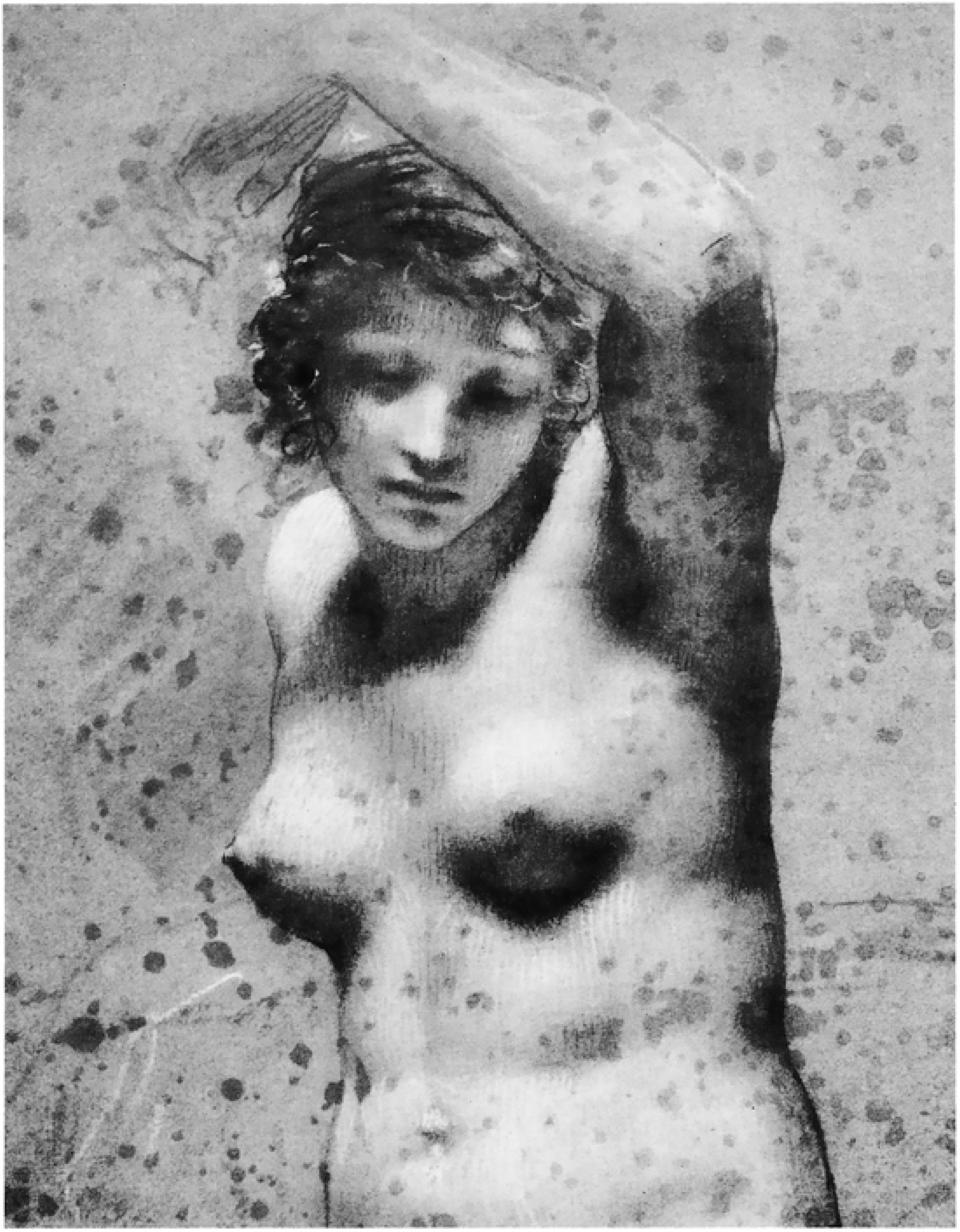


SEURAT

Although the prime reason for shading is to bring forms into relief, it should never be practiced in this narrow sense. It is important to plan every dark, gray, and light area as related shapes that make up a definite and interesting pattern.

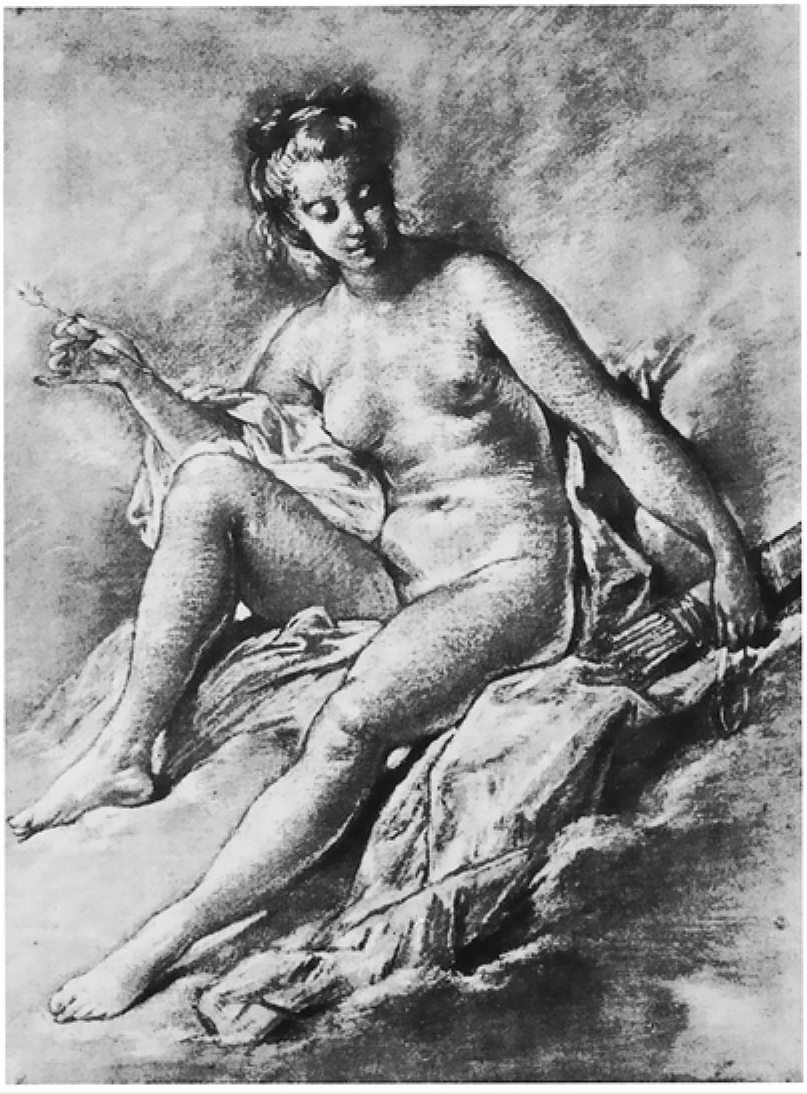


PICASSO

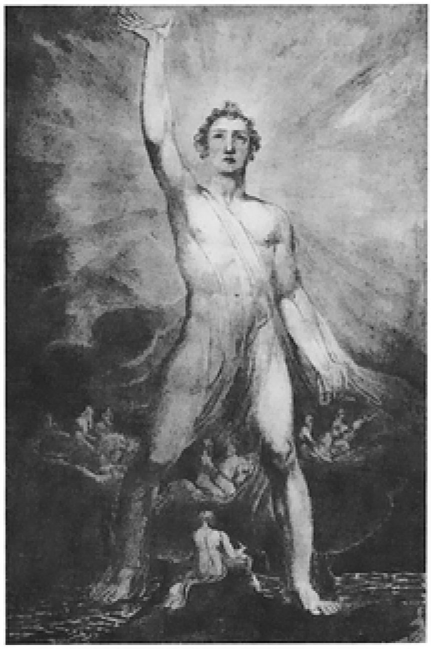


PRUD’HON

Prud‘hon’s drawing and Boucher’s are similar in that both were done on a toned background. The advantage of this method is that the tone of the paper itself is used as a shade of gray or middle tone. The highlights are *then achieved by using white chalk, crayon, or paint, and the darks by a pencil or pen. This method allows for greater contrast. The dark spots in Prud’hon’s drawings are not a fault of reproduction but are defects in the original paper.*

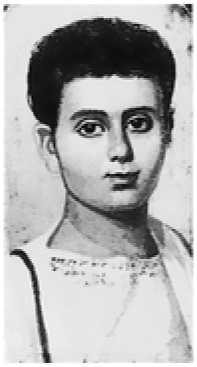


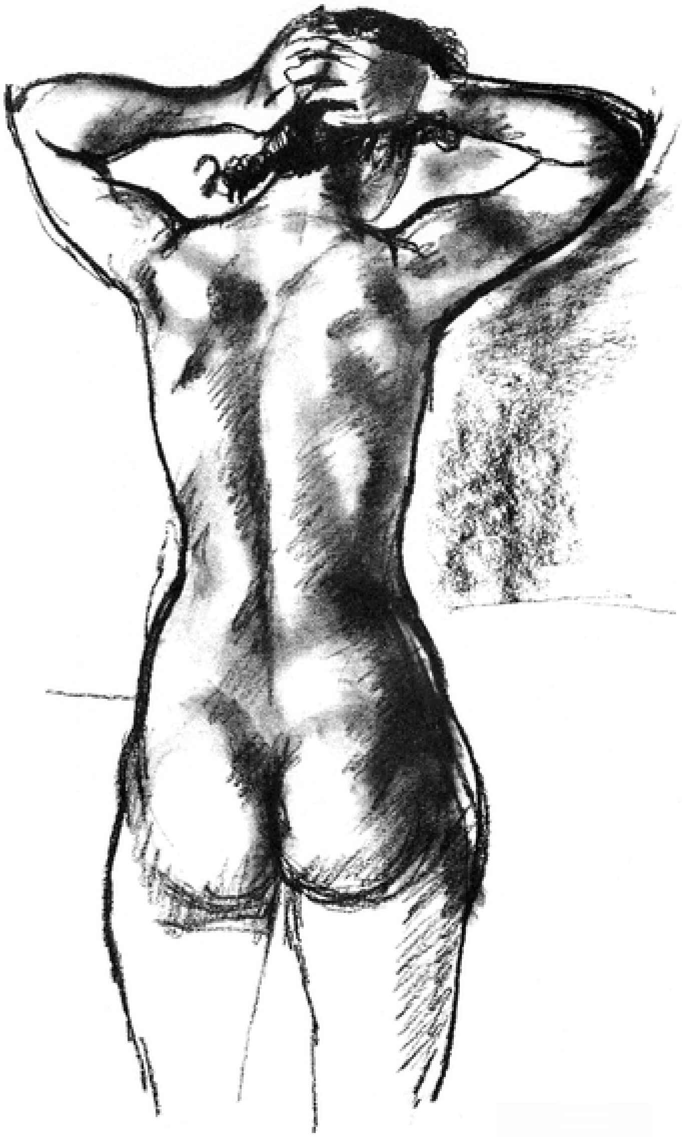
BOUCHER

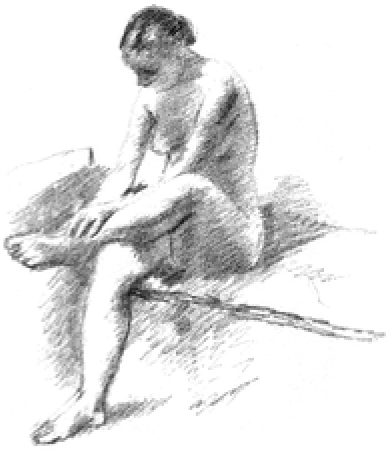


BLAKE

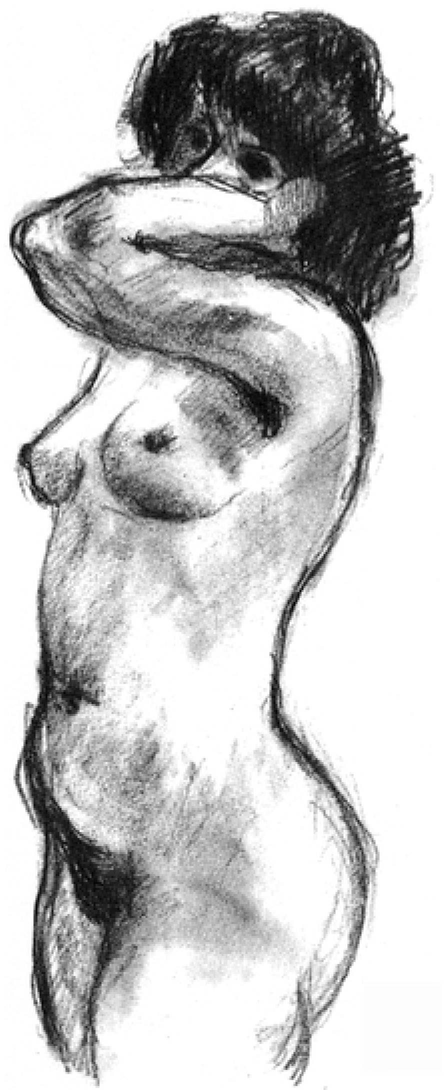
Coptic Painting, Second Century A.D. It is difficult for us to accept the fact that this kind of painting was developed more than a thousand years before Giotto. It looks so modern. Painted in wax, this picture of a deceased boy was placed upon the box which contained his mummified body.



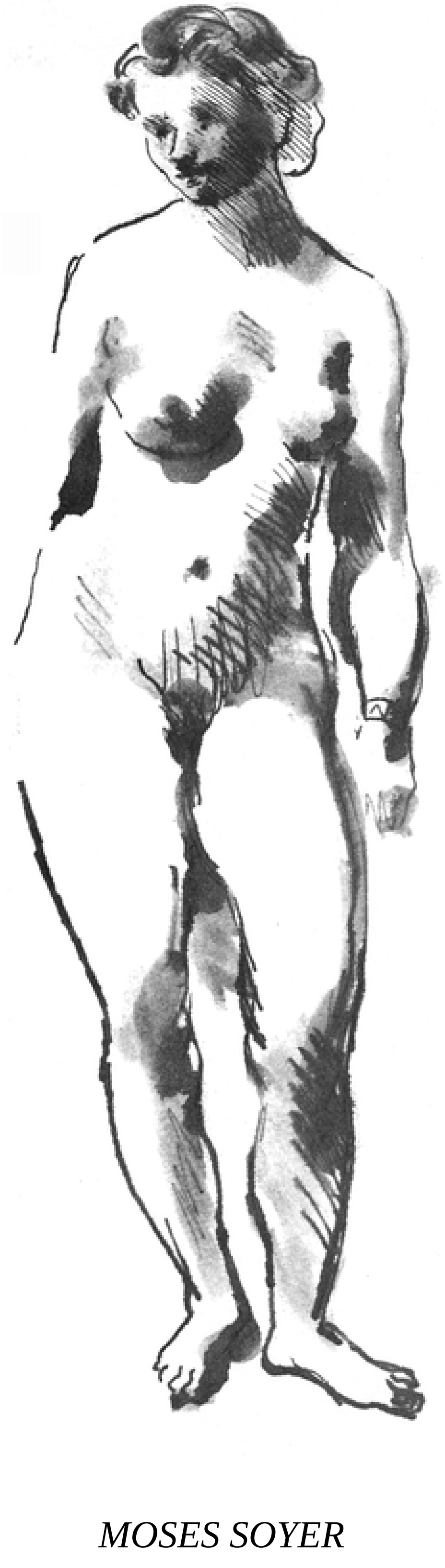




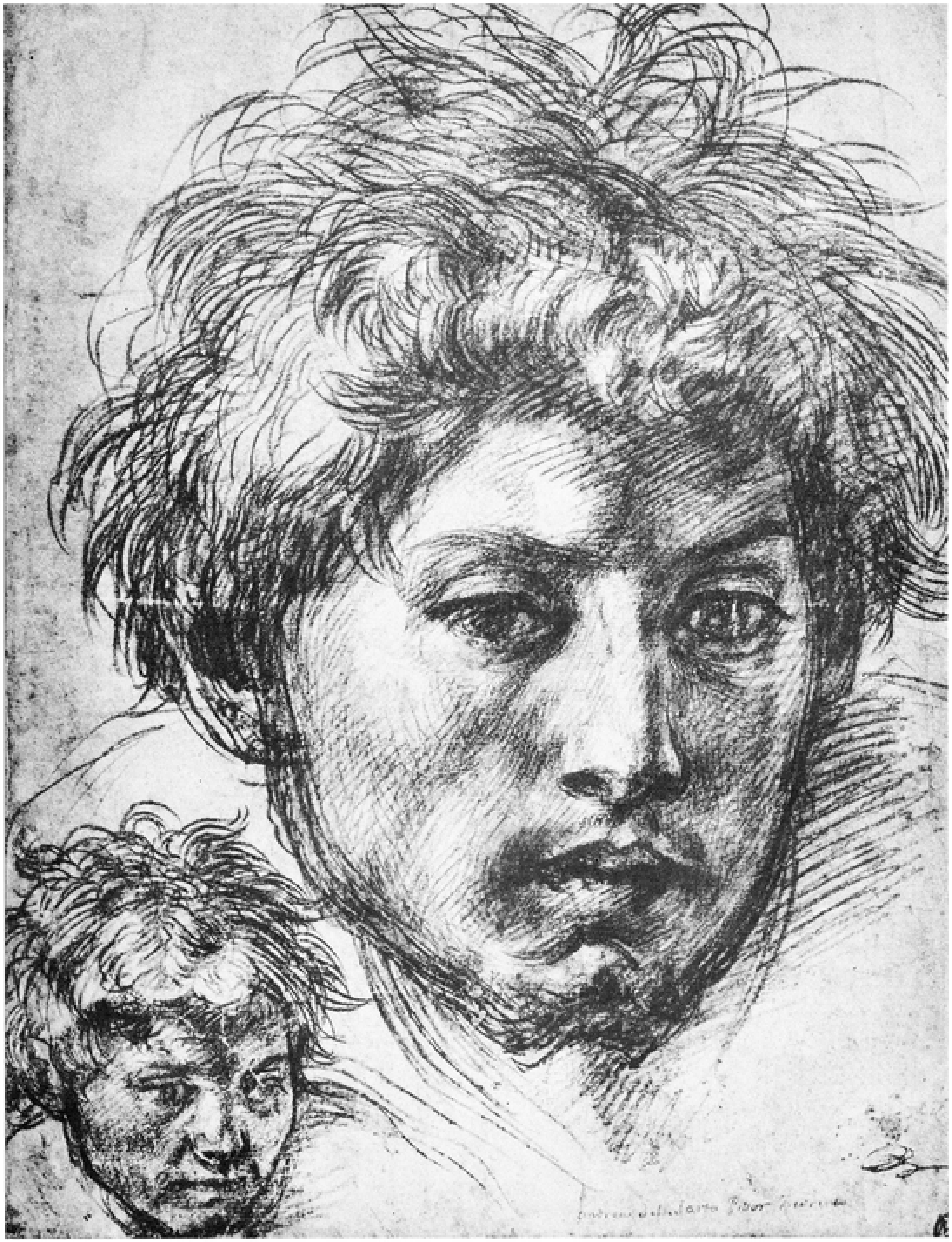
CIKOVSKY



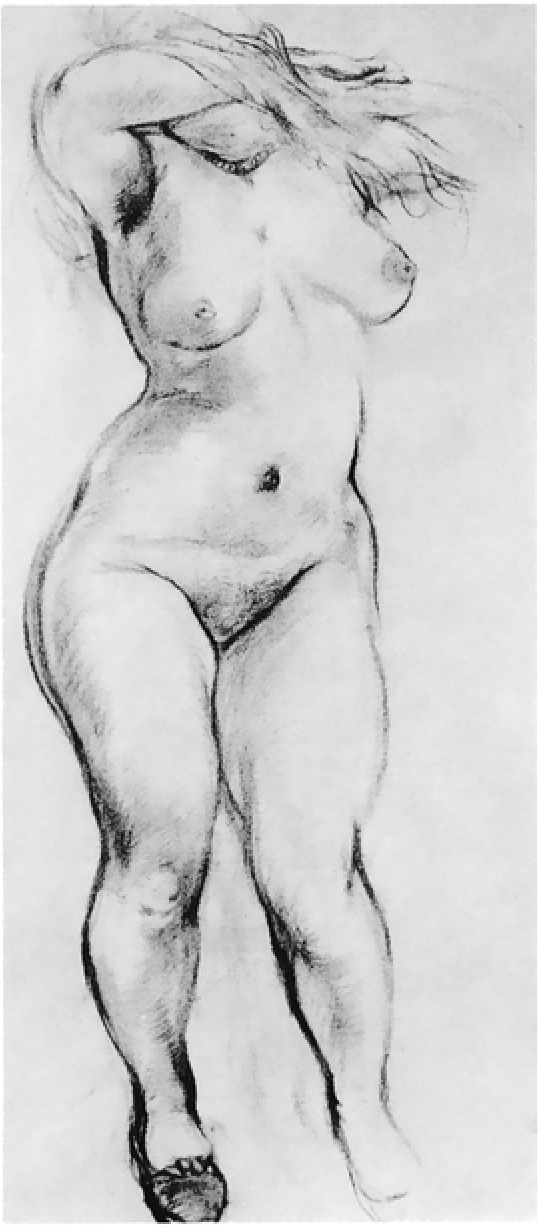
DOBKIN



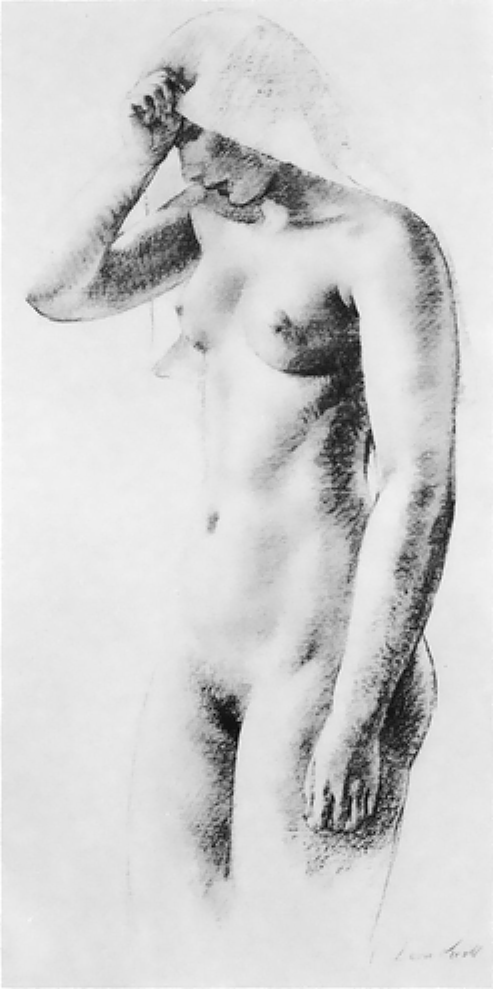
MOSES SOYER



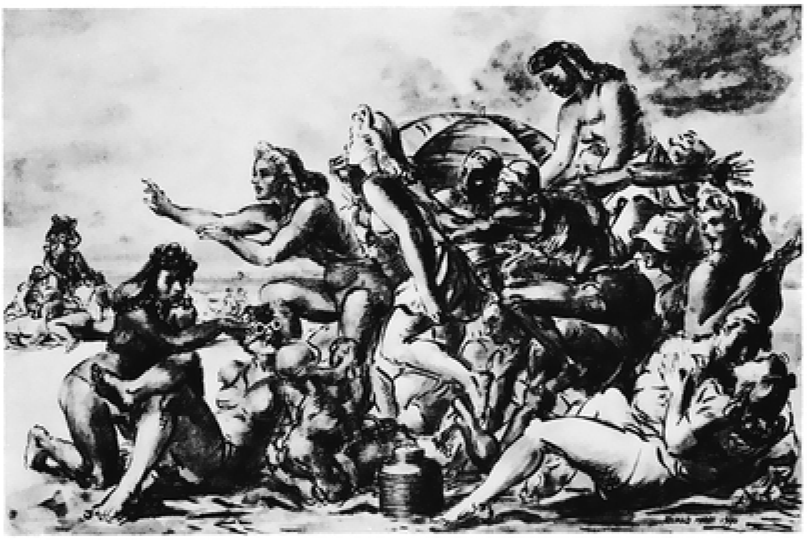
ANDREA DEL SARTO

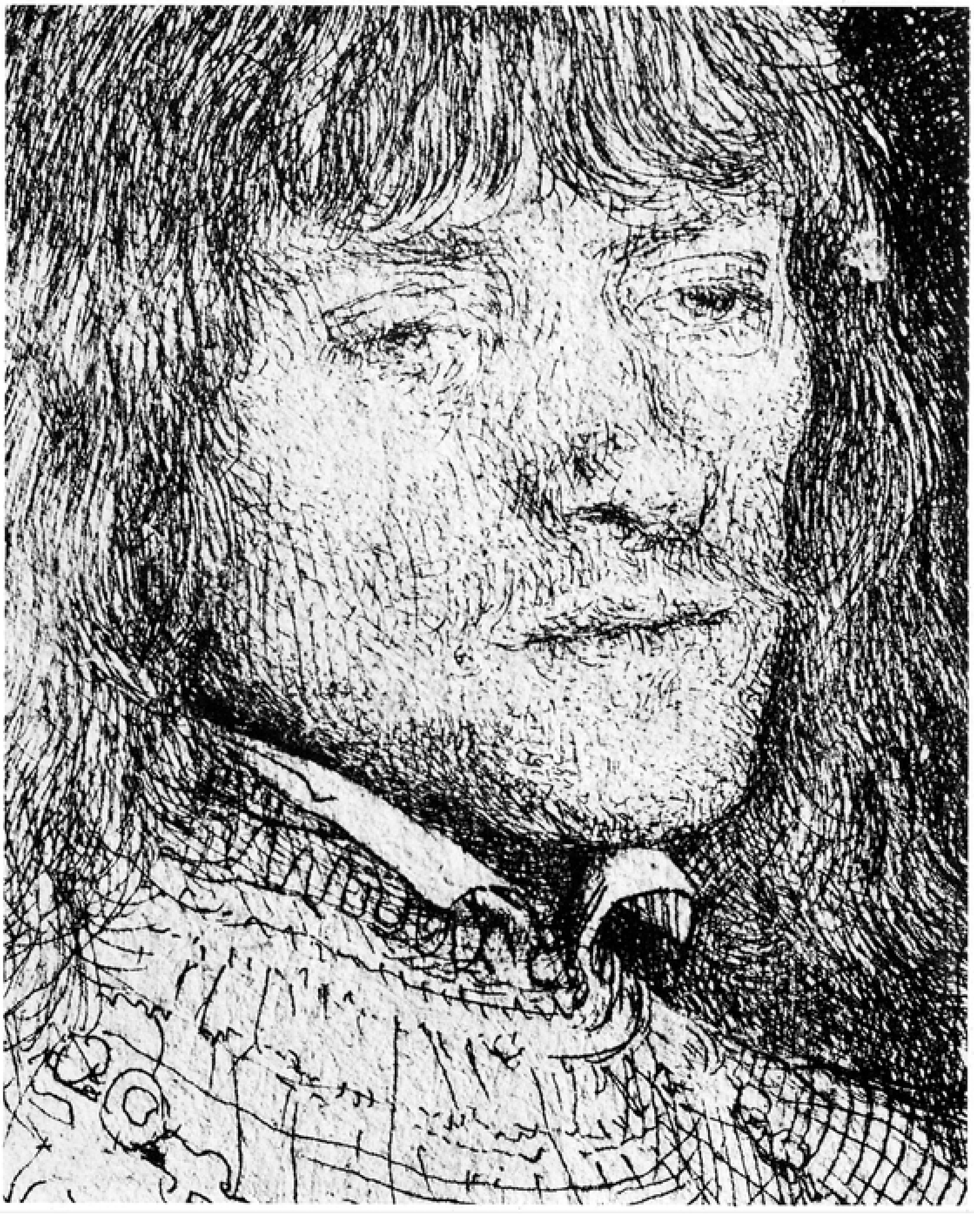


GEORGE GROSZ



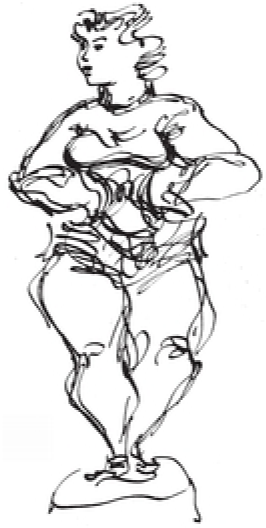
KROLL





REMBRANDT. A detail from an etching by Rembrandt. Enlarged 6 ½ times.

Mediums



CHAIM GROSS

WHEN intrigued by certain effects or qualities in a picture we often ask the artist, “What medium did you use?” This is another way of asking what kind of paint or tool he used. It is important to know because each tool has the potential to do what no other tool can.

Obviously it is silly to attempt to achieve the quality of a brush stroke with a pencil. One is soft and springy; the other is sharp and comparatively hard. One is equipped to make wash strokes; the other, lines. Yet both the brush and pencil have been used in the making of masterpieces.

The best way of learning how to use a medium is to try it out and become familiar with it. After acquiring some skill, one soon discovers what the medium can do, its possibilities and limitations, its suitability to one’s own personality. Above all, learn how to accept its limitations. Then, even the lowly pencil may well become your favorite means of making drawings. And why not? Some of the greatest drawings have been done with it.

There are many different kinds of pencils from which to choose. They may be had in countless varieties of color, shape, and hardness. Sanguine, or warm brown pencil, has been used frequently by many old and modern masters. It has a warmth and softness not found in an ordinary black graphite.

A pencil can be sharpened to a fine point and used for line drawing, very much as one would use a pen. In such drawing, shading is generally achieved by crossing one line over another, often called hatching. A soft dull point is good for gradual modulation (shading). Then there is the litho crayon, a very soft, black, greasy pencil which, compared to other pencils, glides with some difficulty, especially when the paper has coarse texture. Exciting qualities may be achieved by using the side of the litho pencil instead of its point.

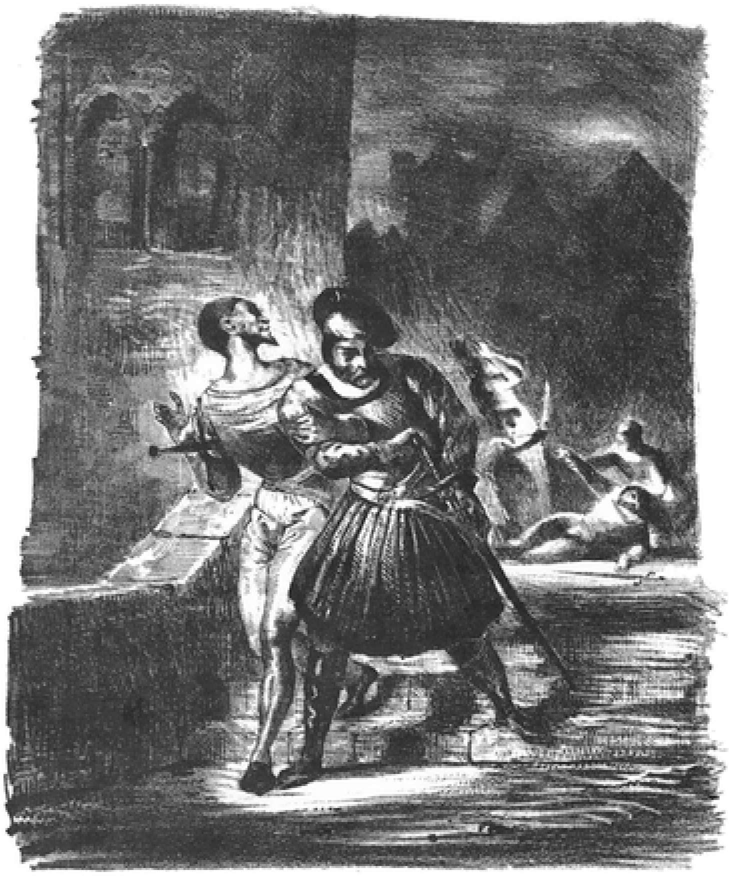
A brush can be pointed, flat, very soft, springy, or hard. In each case it may be used to produce different results. The loading of ink on a brush is very important. If loaded well, it will flow easily and cause the ink to spread, but if very little water or ink is used, or if the brush is semi-dry, it will create a dry brush effect. A dry brush glides on paper with difficulty; it never makes a continuous line; it drags and appears dry in quality, as if real effort had been exerted in making the brush go.

The choice of paper is important, too, because it is available in such a great variety of surfaces. There are papers that have hard surfaces and some that behave like blotting paper, very absorbent and causing the ink to spread. Experience and control are necessary when using absorbent surfaces. For charcoal drawing, paper with a coarse, toothy surface is perhaps the best.

There are colored papers that add softness and mystery to a drawing. Scratch board, more often used by commercial artists, may be used when a white line on a black background is wanted. The board is painted black with India ink and scratched with a sharp instrument. Thus white lines are achieved by breaking through the black surface.

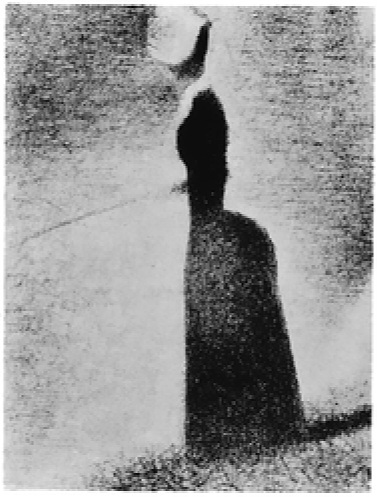
The above-mentioned means of expression constitute but a fraction of the mediums used by artists. Many books have been written on this subject alone. The reason some of these mediums are mentioned briefly is to make the reader aware that countless ways of making a drawing are open to him

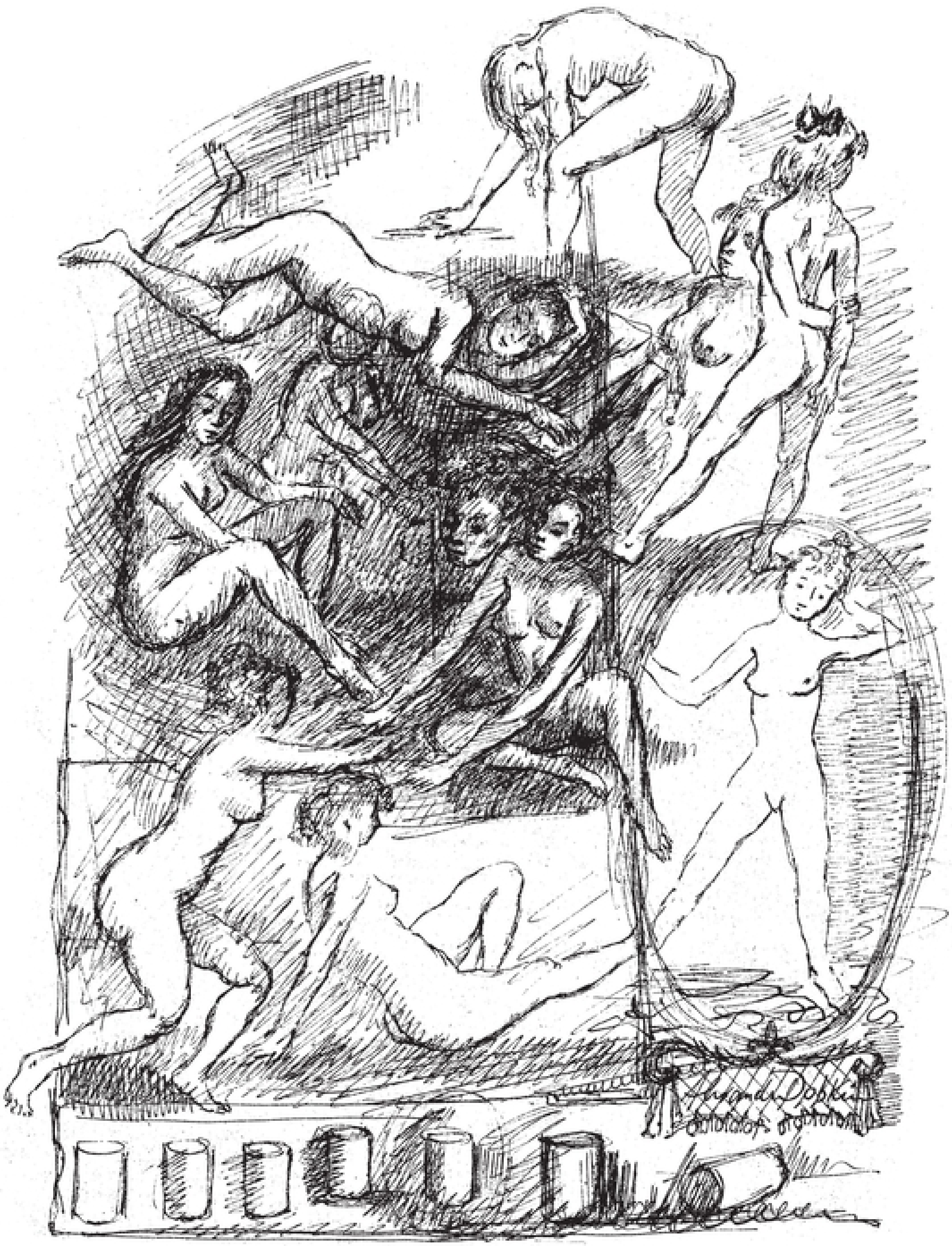
—that it really pays to look around. After some search and experimentation the reader may find his favorite medium, one which may stimulate his imagination and desire to produce and put him on the road to self-expression.



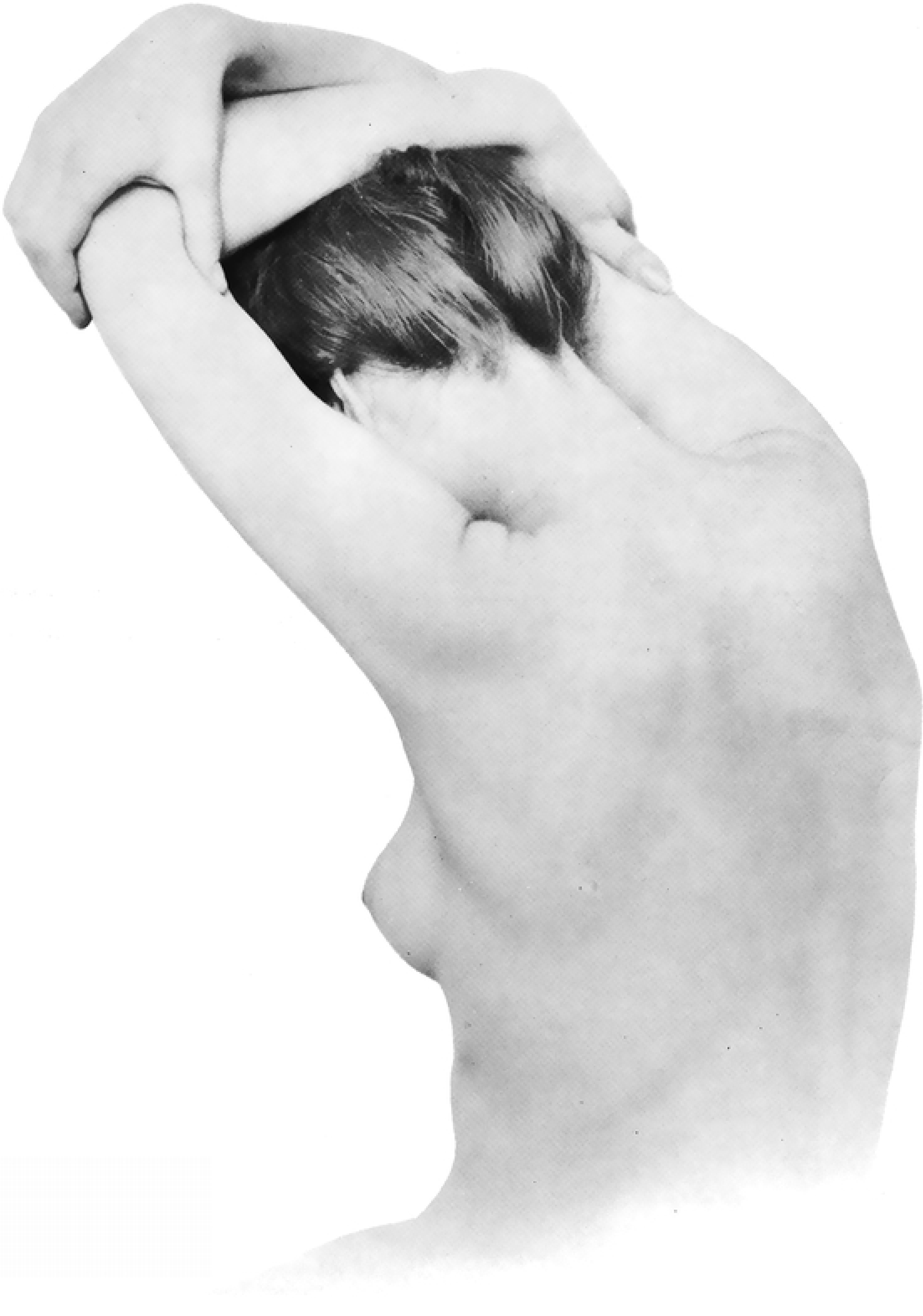
DELACROIX. Lithographic crayon on stone

SEURAT. Study for a painting done with a soft crayon

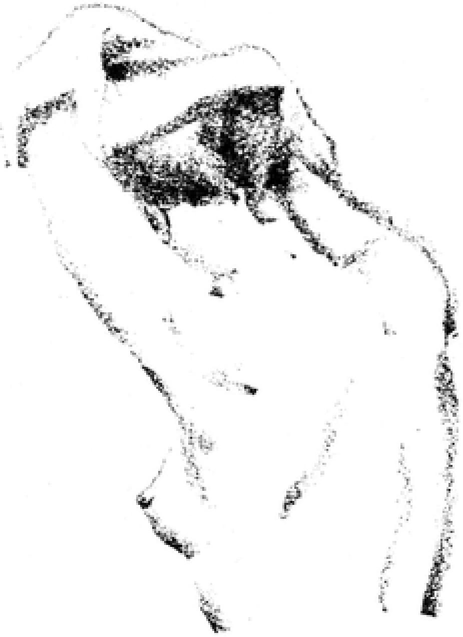




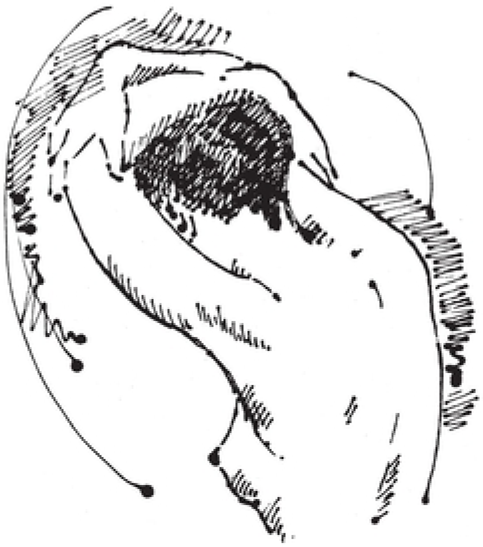
DOBKIN. Pen and ink drawing on soft absorbent Japan paper. On this surface no erasing or correction is possible. Too strong a pressure with the pen upon this paper will create ink spots.



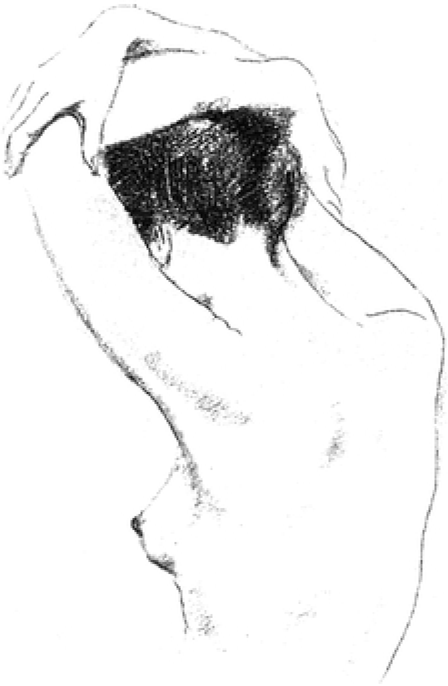
NEWMAN. Photograph



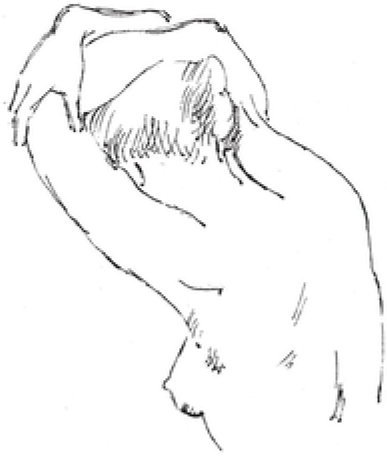
DOBKIN. Lithographic crayon on coarse-grained paper



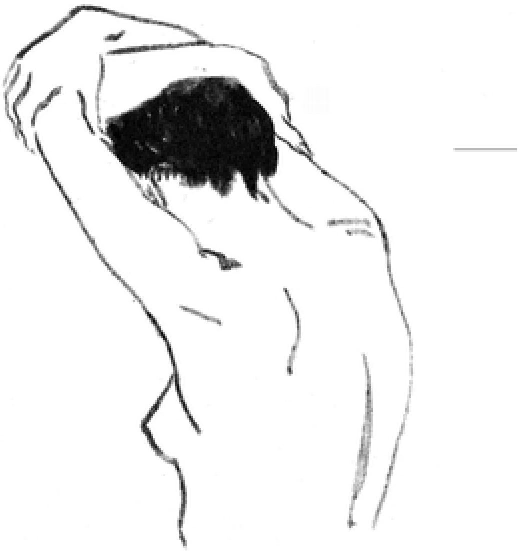
Pen and ink on white blotting paper



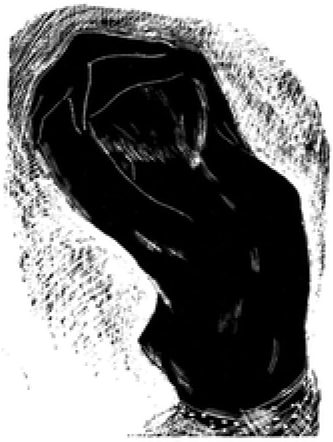
A fairly soft pencil



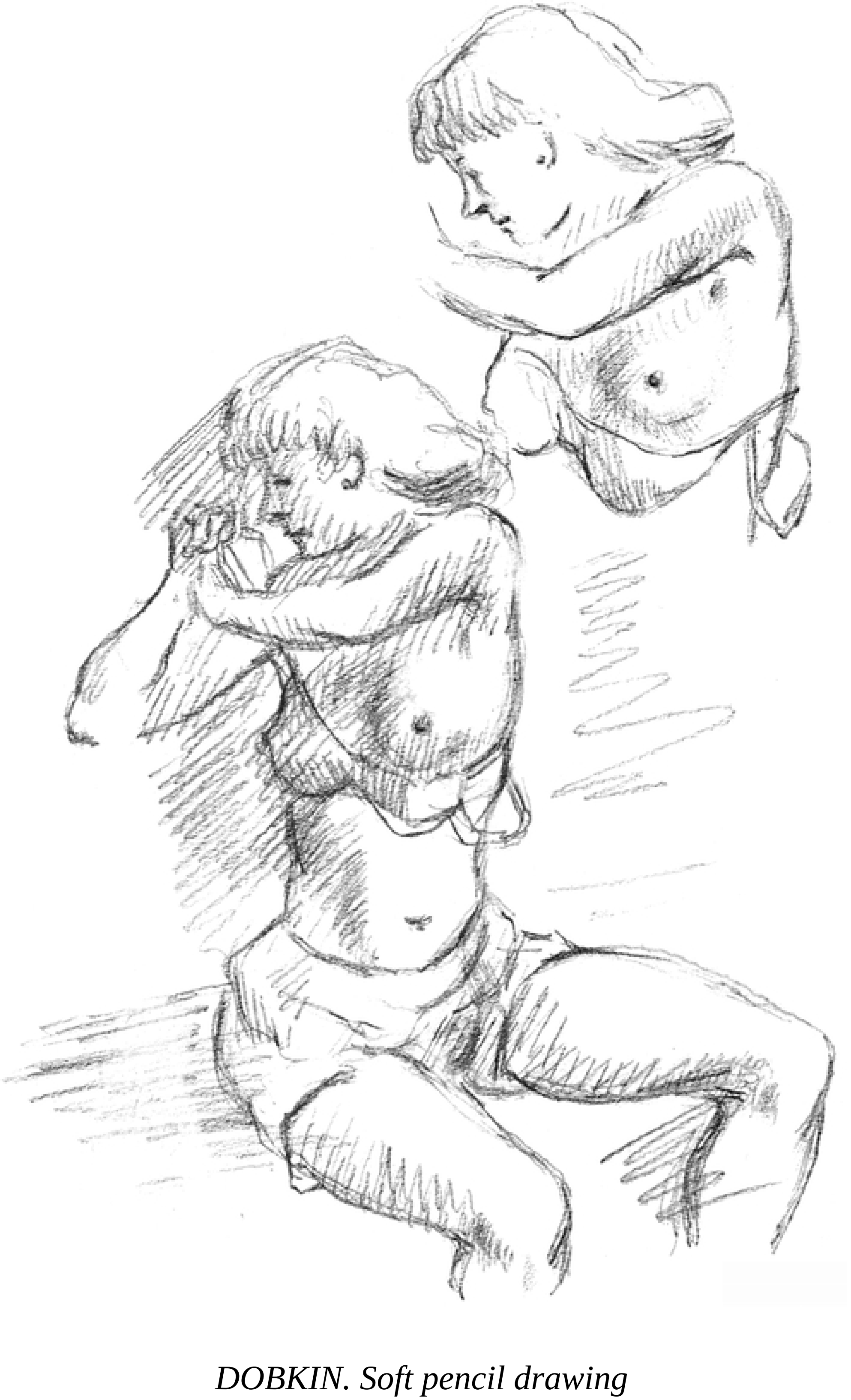
Pen and ink on paper



Brush

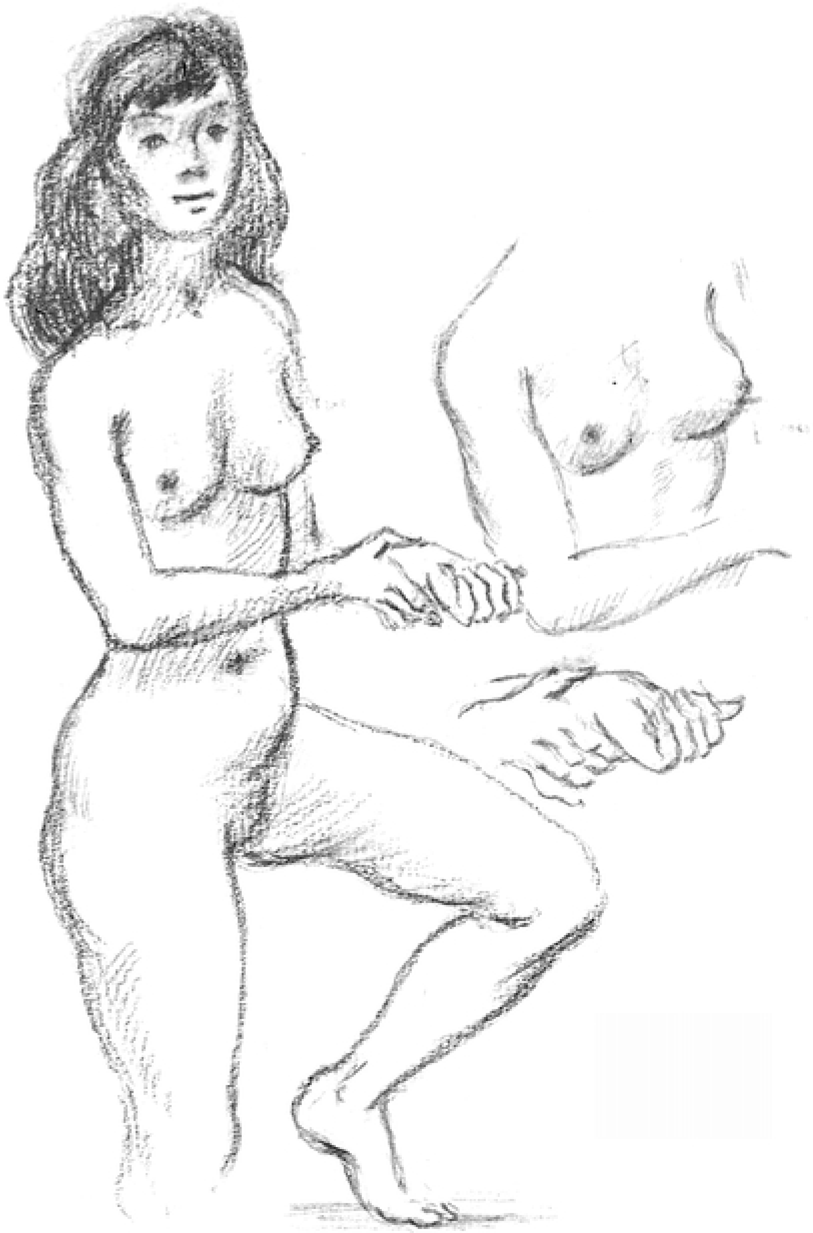


Etching needle upon scratch board

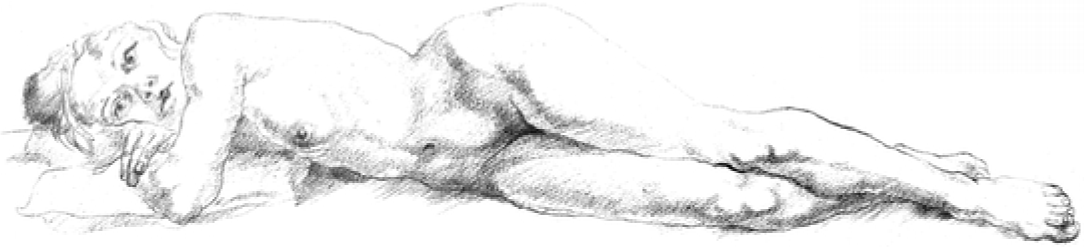


DOBKIN. Soft pencil drawing

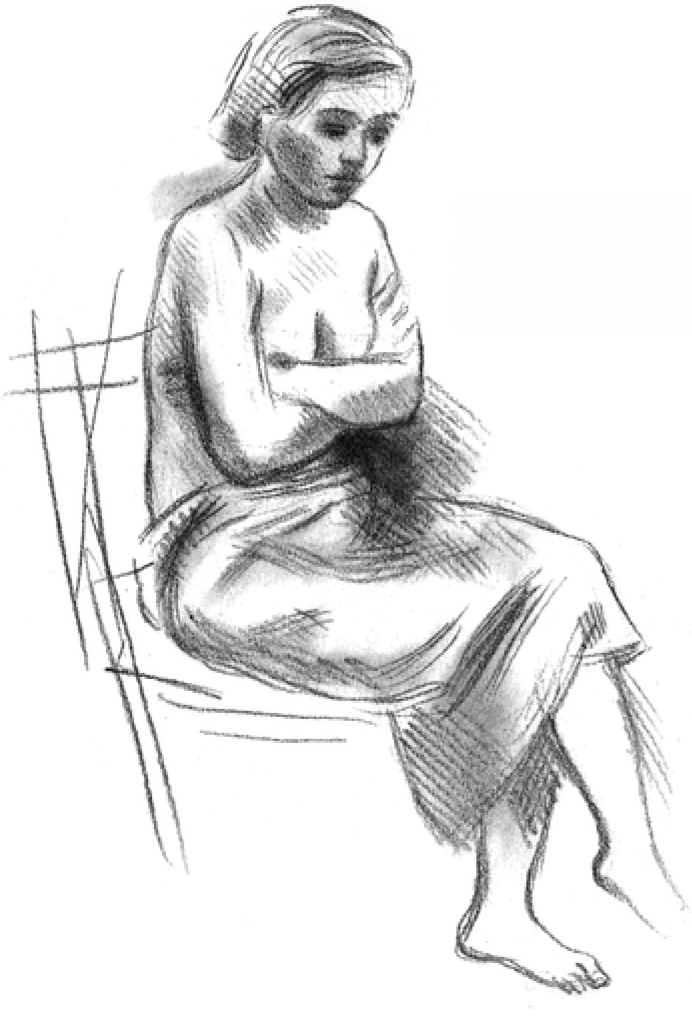
The drawings on this page were done with a fairly soft pencil on white drawing paper.



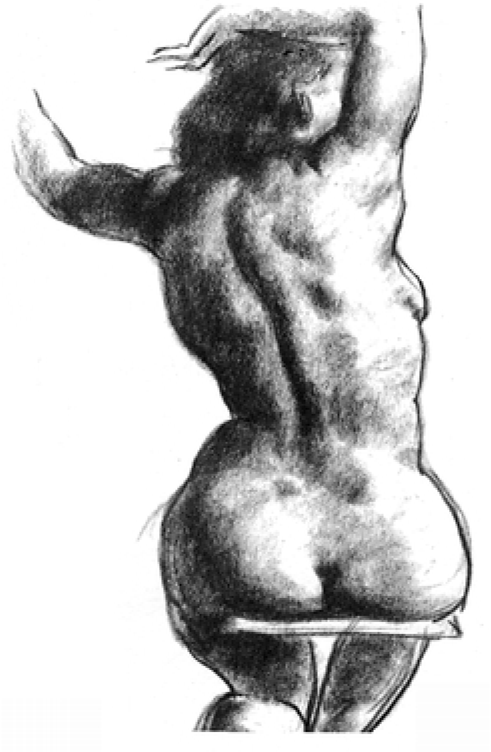
DOBKIN



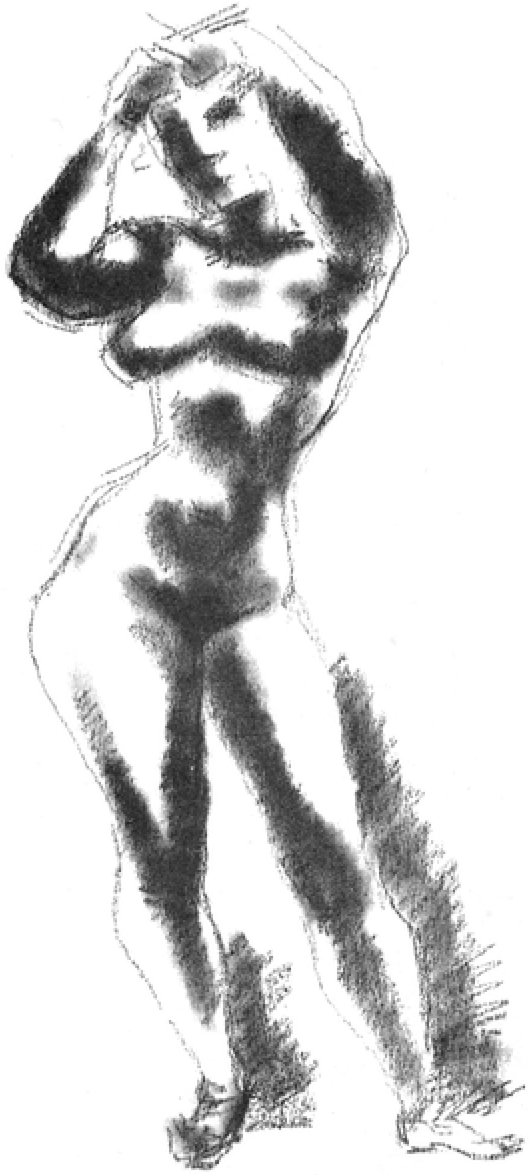
EVERGOOD



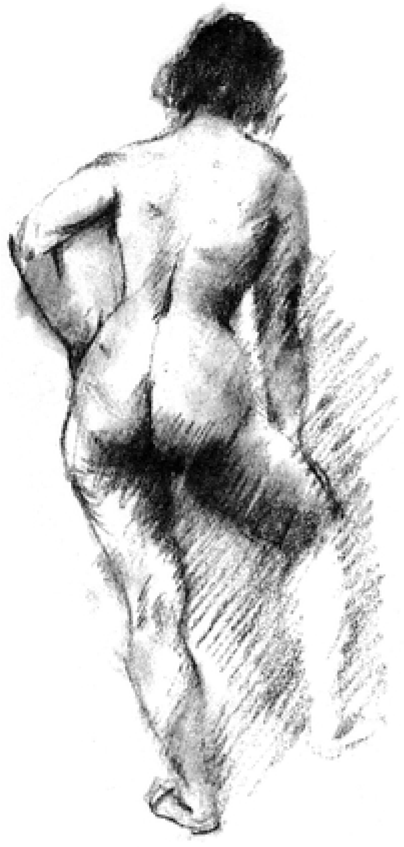
MOSES SOYER. Soft pencil



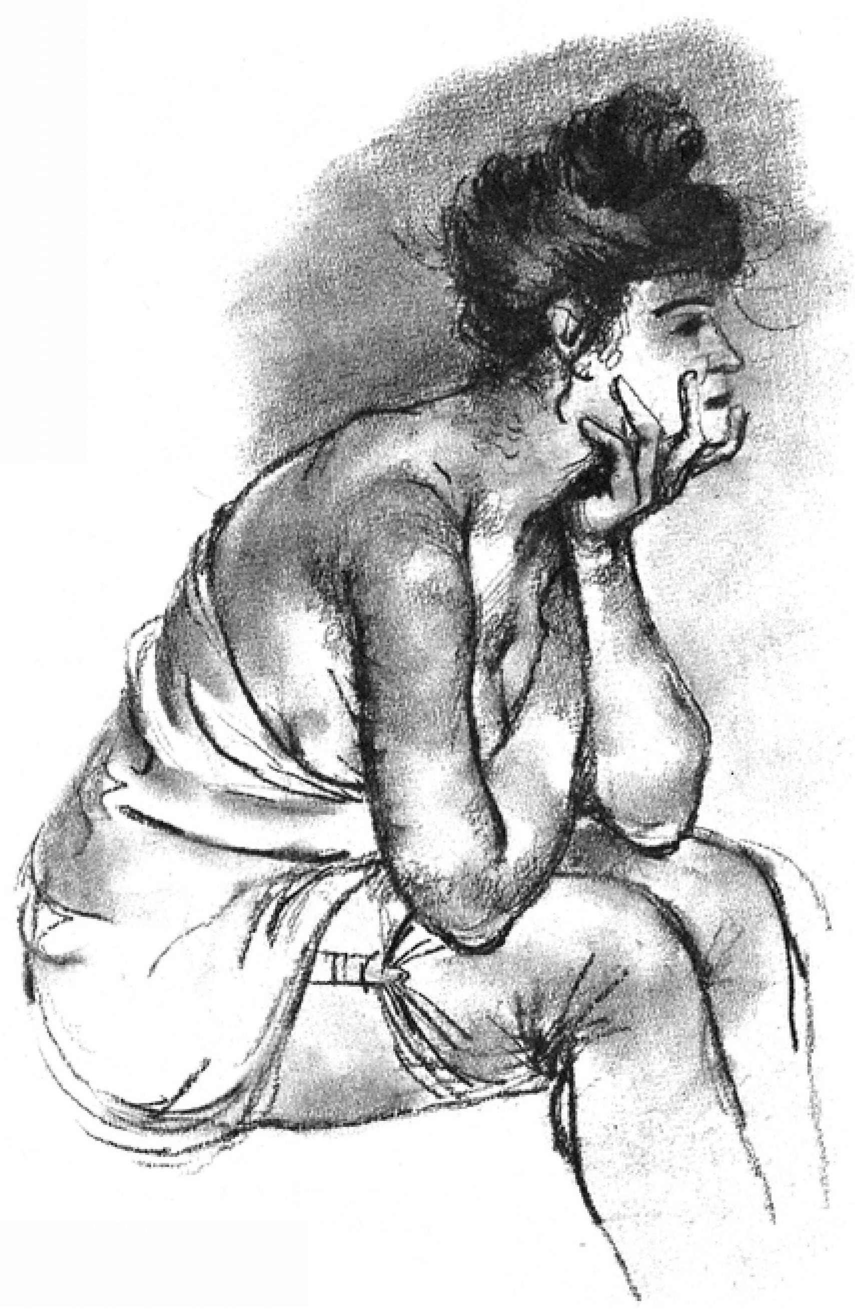
CASTELLON. Charcoal on smooth paper



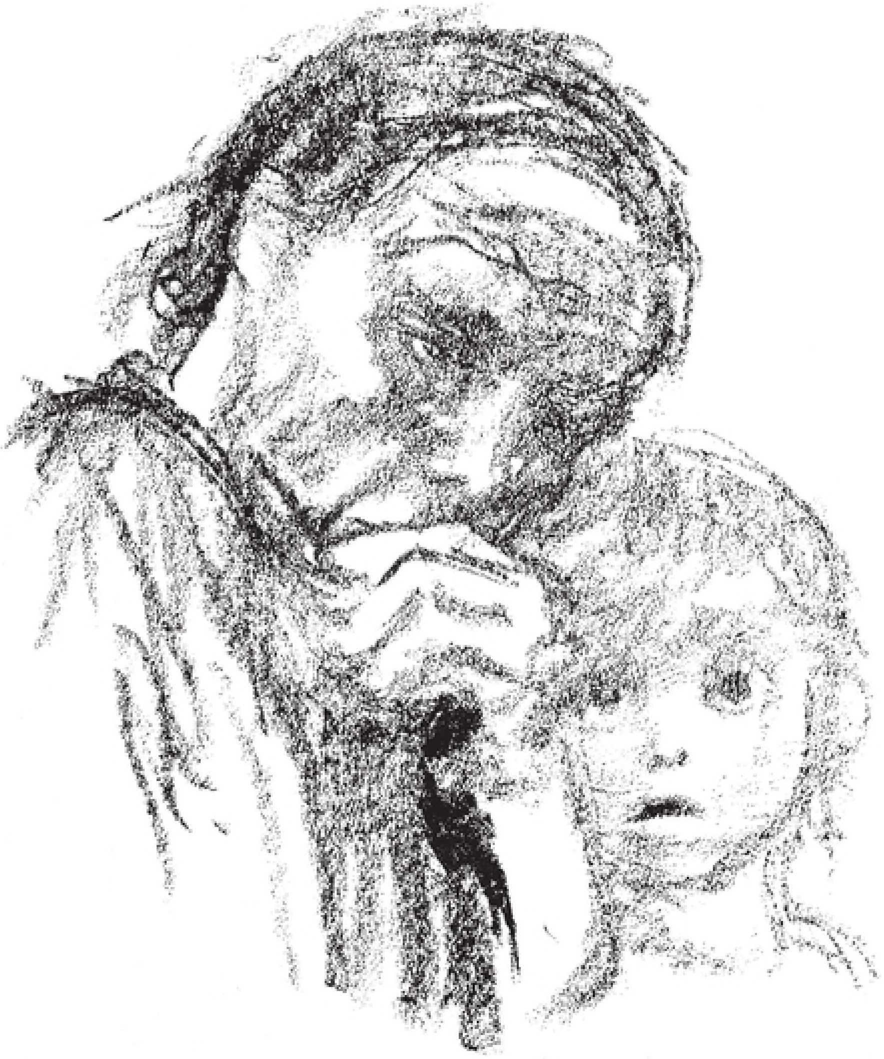
CHAIM GROSS. Sanguine crayon rubbed down with the finger



CIKOVSKY. Soft pencil

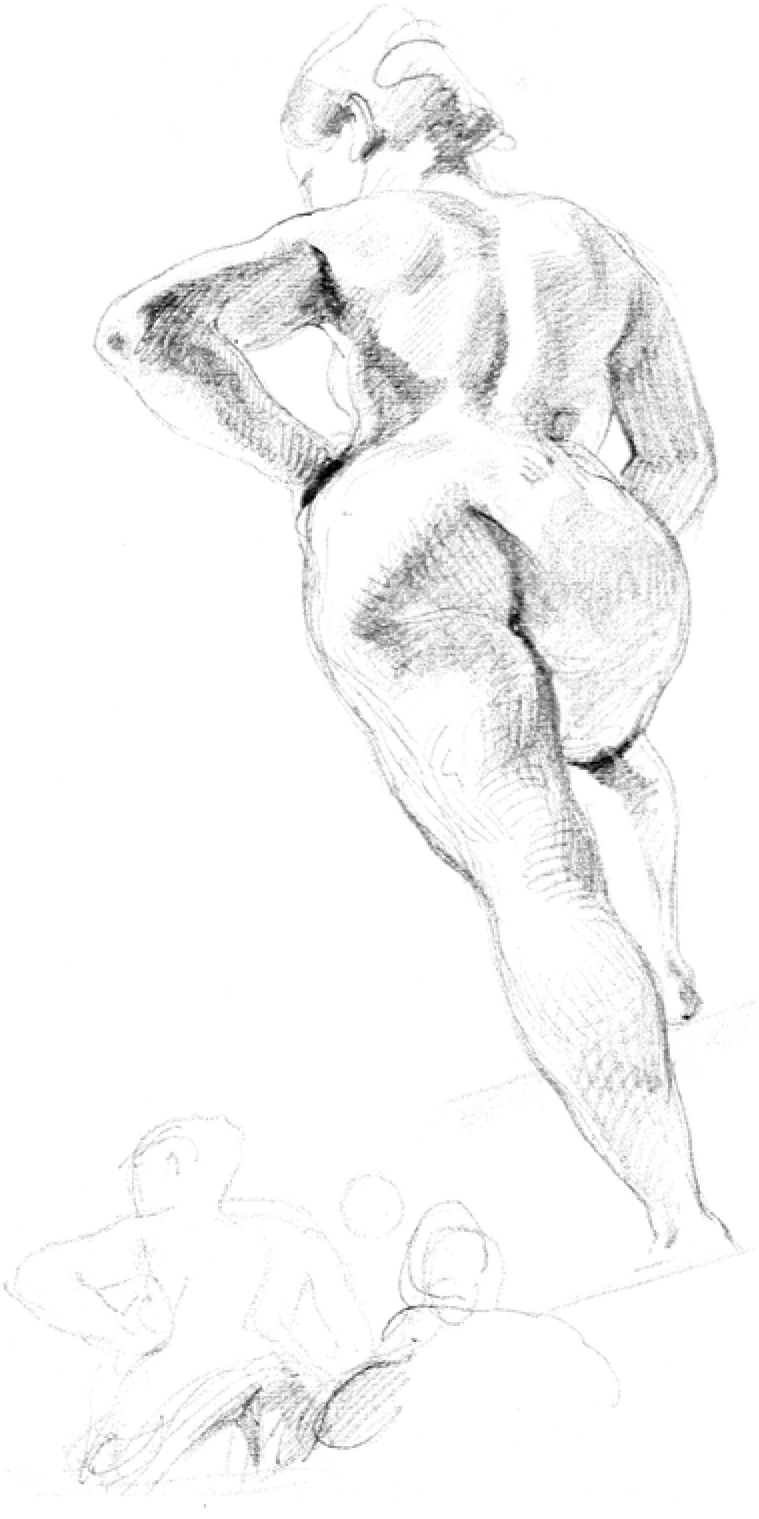


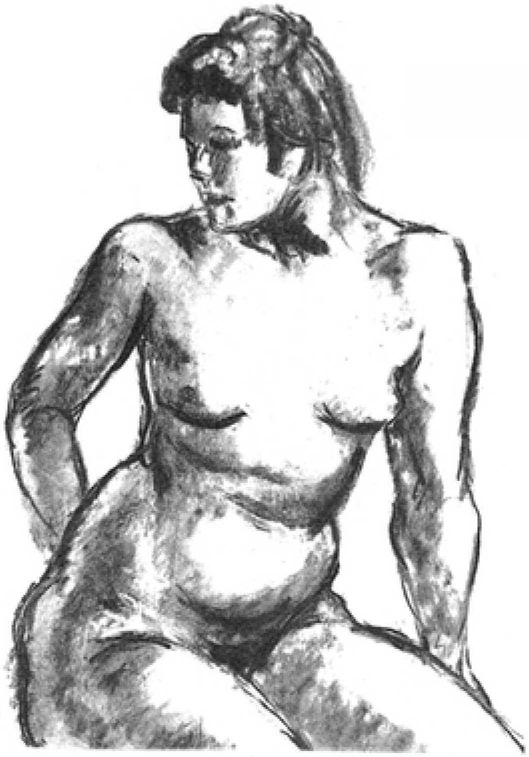
CIKOVSKY. Conté crayon



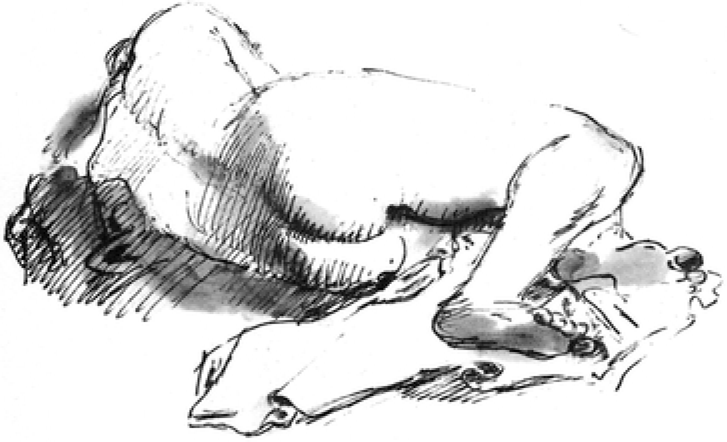
KOLLWITZ. When an artist wants to work in his own studio, away from the lithographer's shop, he often draws on paper with a lithographic crayon. The drawing then can be transferred to the stone. The advantages of working this way are (i) the possibility of making several versions of a subject; (2) the opportunity to take advantage of particular textures of various papers. Kaethe Kollwitz made most of her lithographs in this way.

(RIGHT) DELACROIX. This is an unusually finished drawing for Delacroix, probably the end result of many rapid sketches. A study for a mural, it is carefully worked out in terms of light, both direct and reflected, resulting in a definite pattern that becomes the basis of an angular composition.

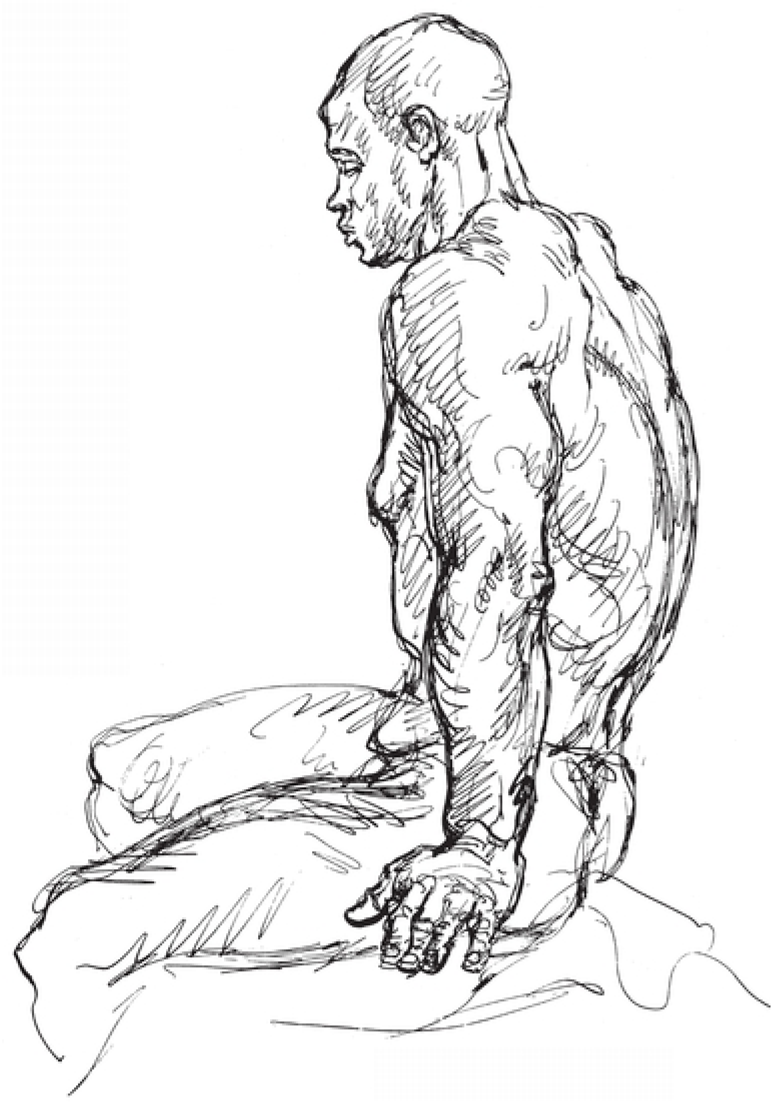




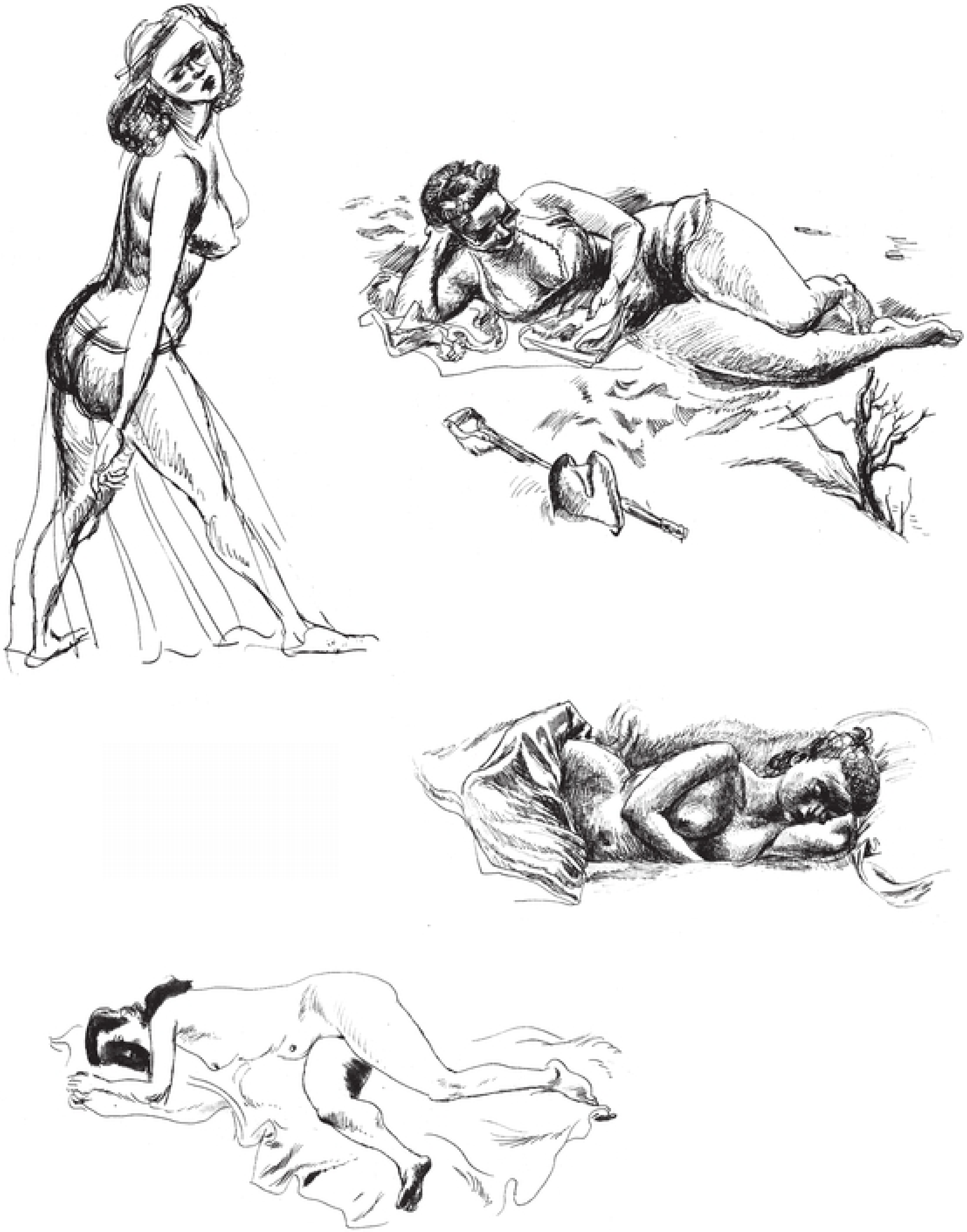
WILSON. Charcoal



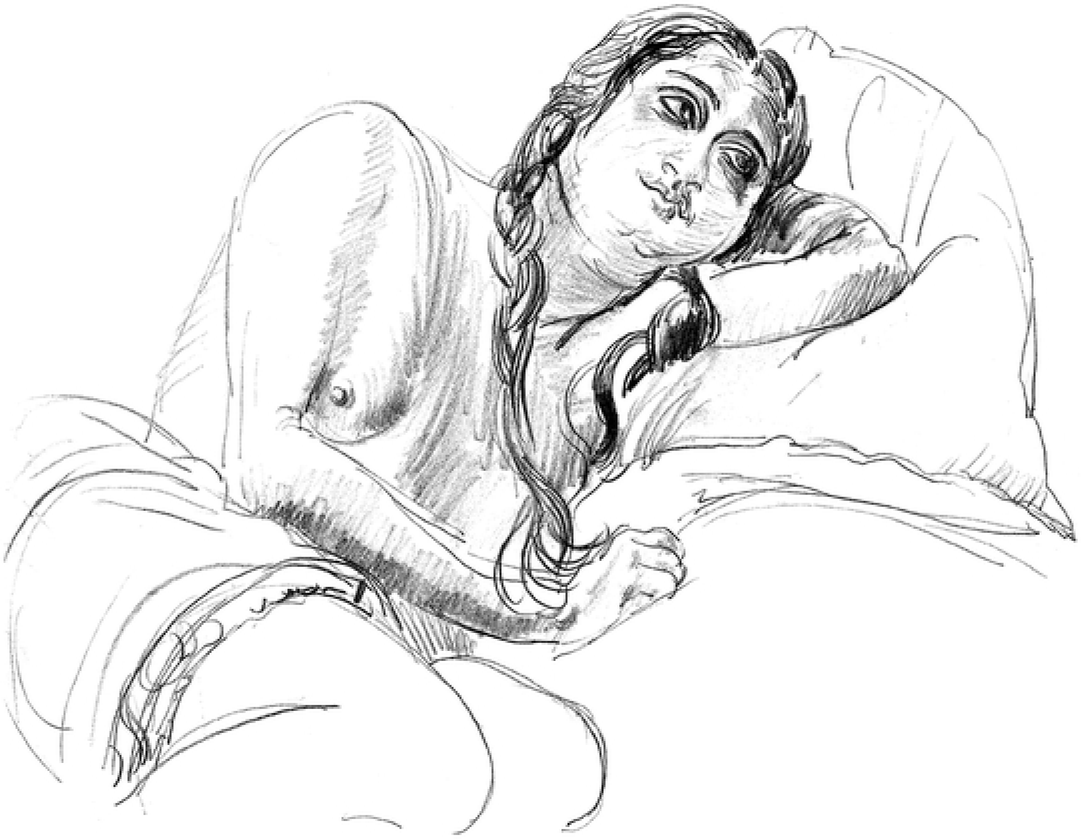
RAPHAEL SOYER. Pen and ink



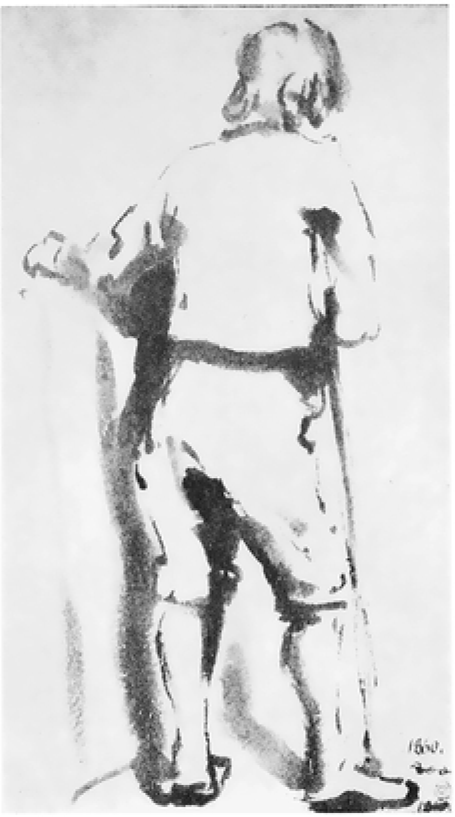
REISMAN. Pen and ink

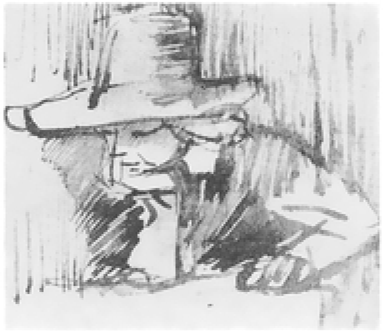


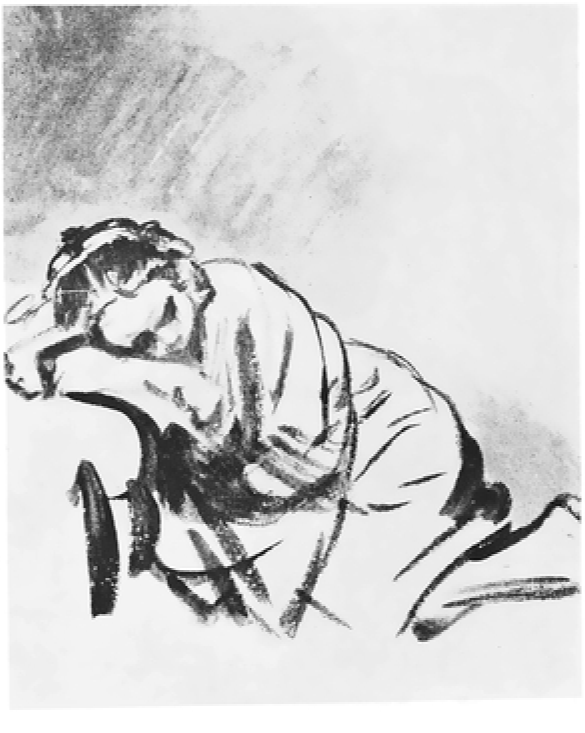
BOHROD. Pen and ink



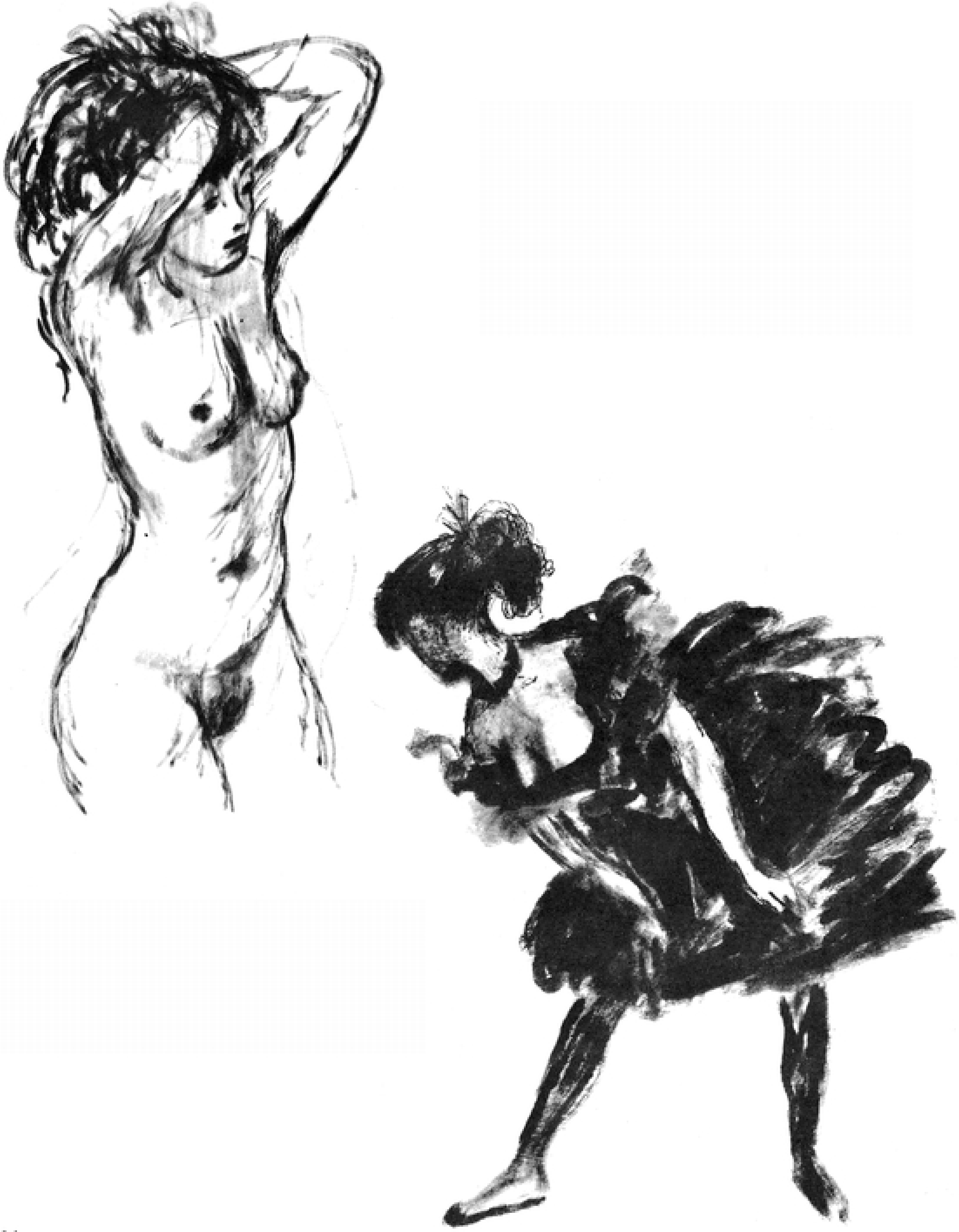
EPSTEIN. Perhaps the commonest commodity is a pencil. It is familiar to us from our earliest childhood. Yet many artists avoid it, for, as a medium, pencil has no particularly striking quality. There is nothing to overcome; it is easily used and cheap. It can be smudged, graded, or cross-hatched. It comes in countless degrees of softness or hardness. One can sharpen it to a needle point or use it thick. In short, a pencil drawing is what an artist makes it. Some artists were masters of it—Ingres, Degas, Pascin, and Epstein, to mention a few.



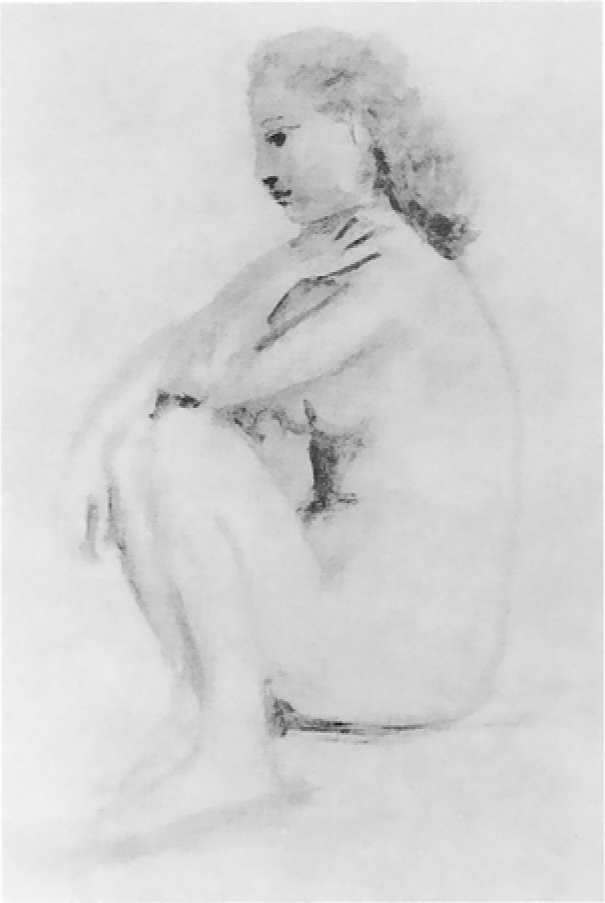




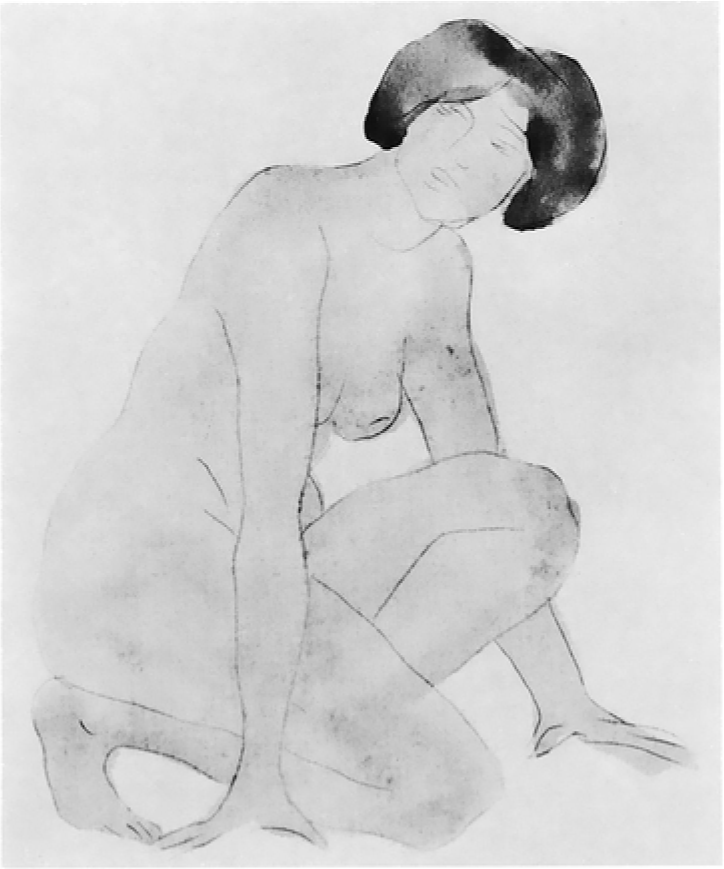
REMBRANDT’S dramings were probably done with a brush or a soft goosefeather pen.



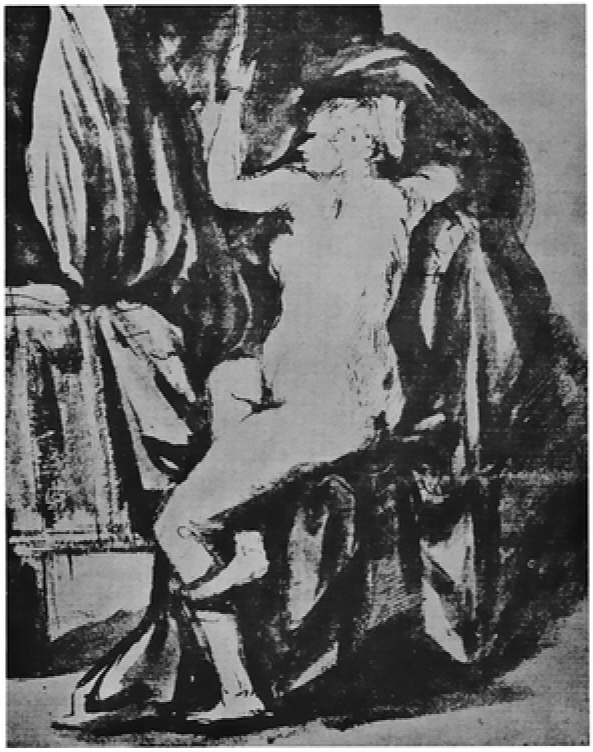
DOBKIN. Dry brush drawings. If the brush is not quite dry enough after dipping it into ink, it is advisable to have a newspaper or some other paper handy to wipe off the excess ink before beginning to draw.



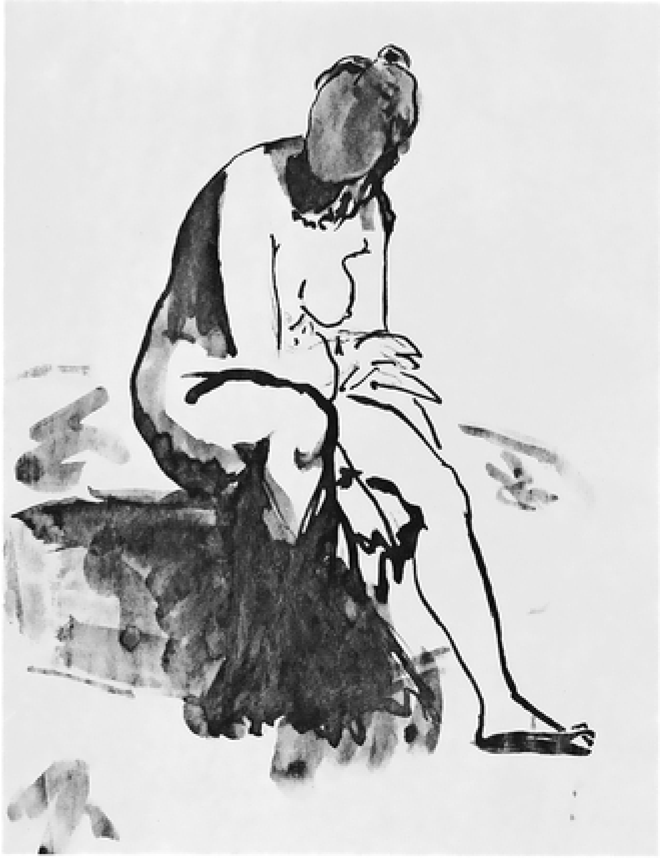
PICASSO. Very light wash drawing

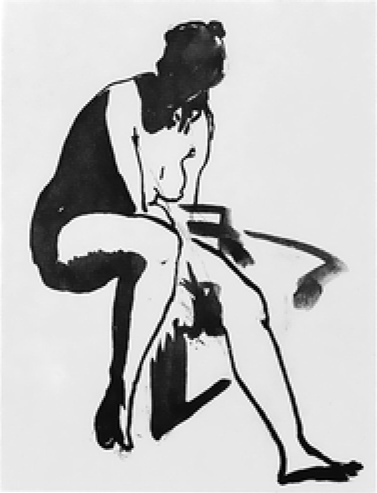


RODIN. A typical Rodin way of drawing is first to do a study in pencil and then lay in a light wash of pale brown ink within the contours of the figure.

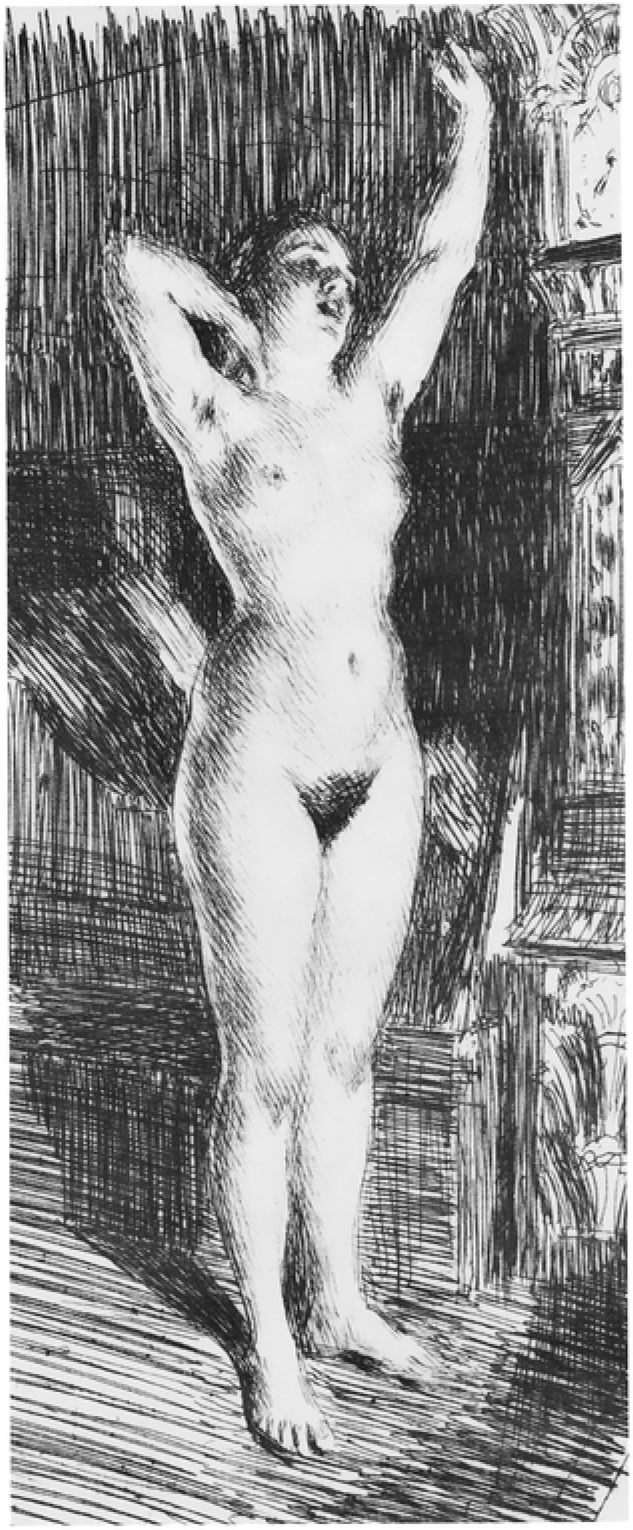


REMBRANDT. Wash drawing

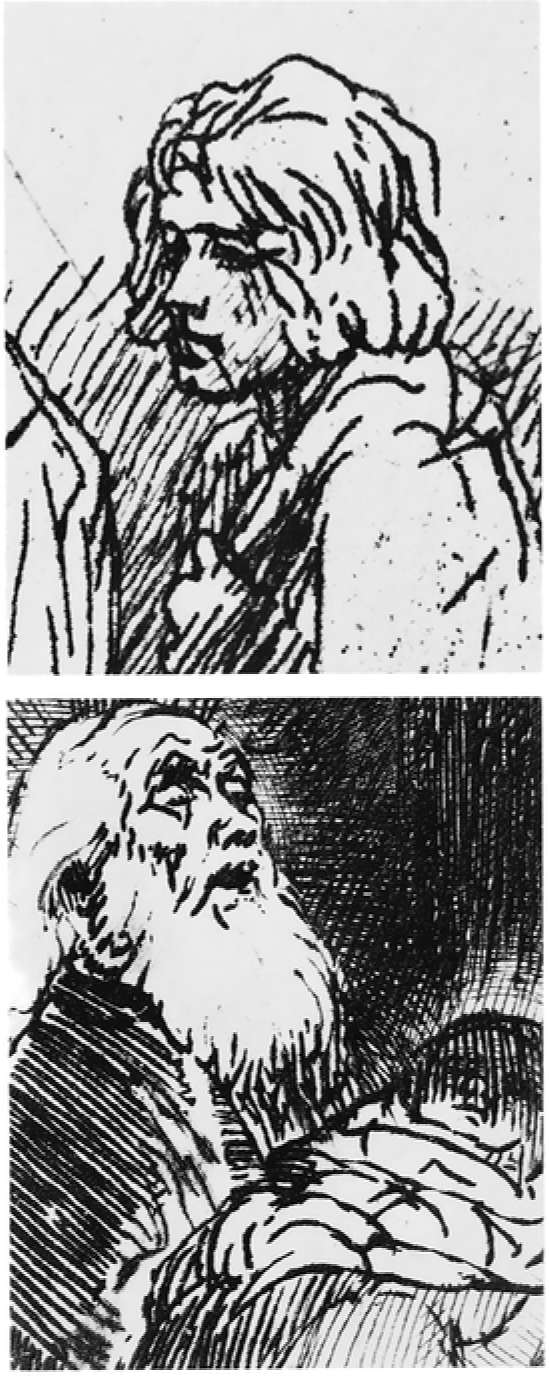




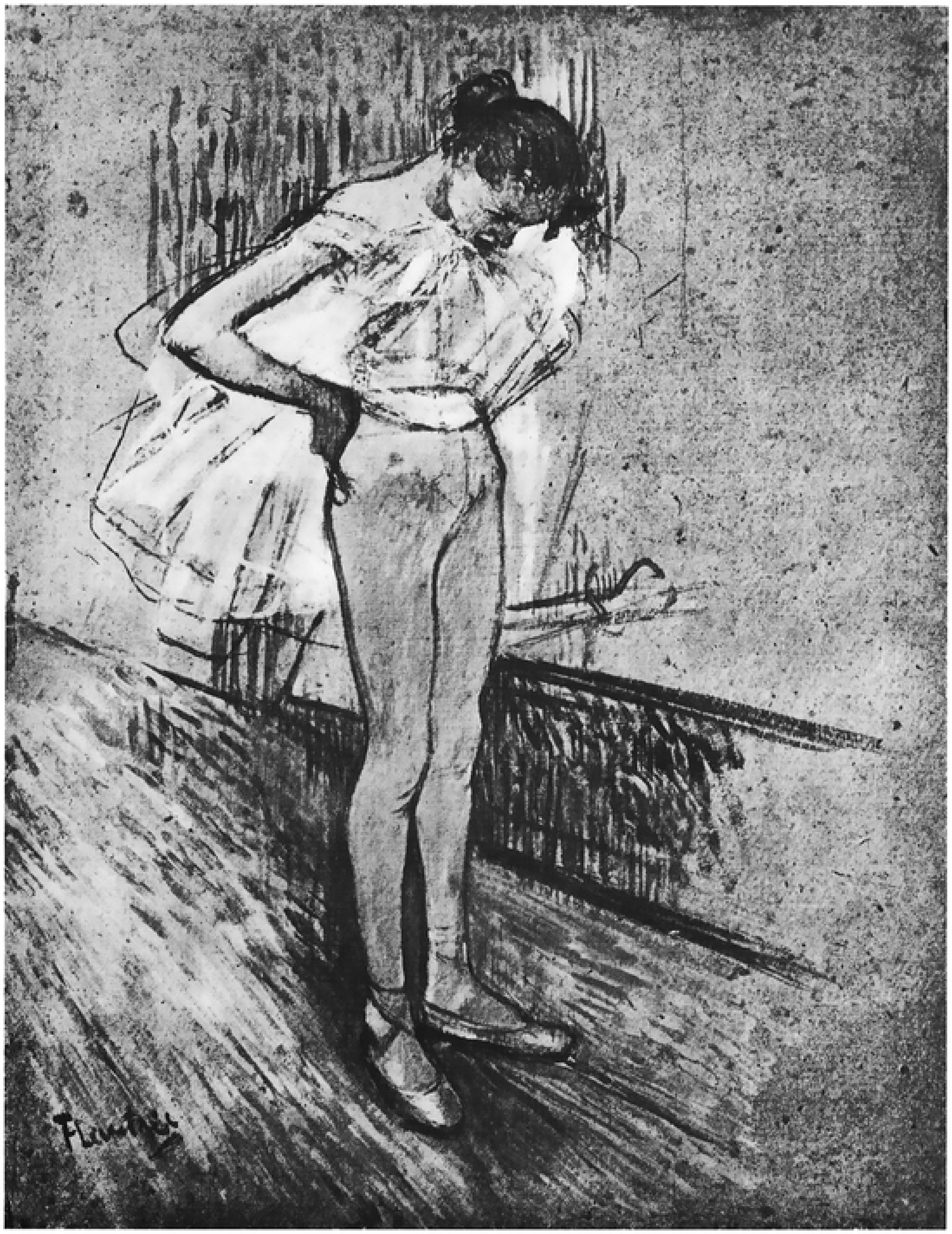
MANET. Here the artist is working out light and shade, or black and white areas, in terms of pattern. These almost–black spots upon white paper make an emotional impact upon us. The object is to arrest our attention—to evoke an immediate response. This type of drawing should, therefore, be made with a medium that lends itself to rapid indication, such as brush and ink. It is essential to make more than one version of the same thing, drawing a bit more emotionally than rationally. From among many, you may choose the one you like best.



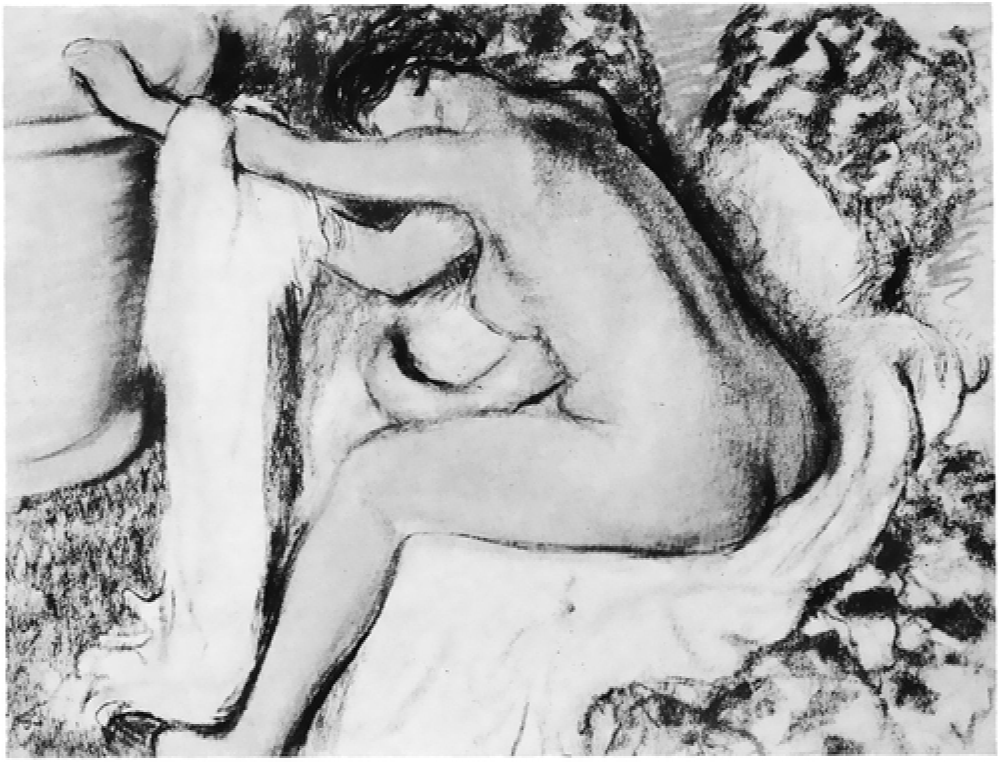
ZORN. Etching



REMBRANDT. To a students of drawing, etchings should be of great interest because they may well inspire some kind of new technique when drawing with pen and ink. The two heads above are unusual because they are enlarged 16½ *and* 7½*times respectively.*



TOULOUSE-LAUTREC



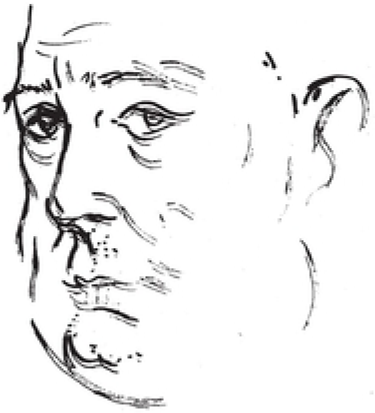
DEGAS

"Where does drawing end and painting begin?" is the question many people ask. The answer is that drawing never ends. An artist draws all the time, even as he paints. Painting without drawing is nonexistent. I think that the confusion arises out of the assumption that one doesn't draw with a brush and paint.

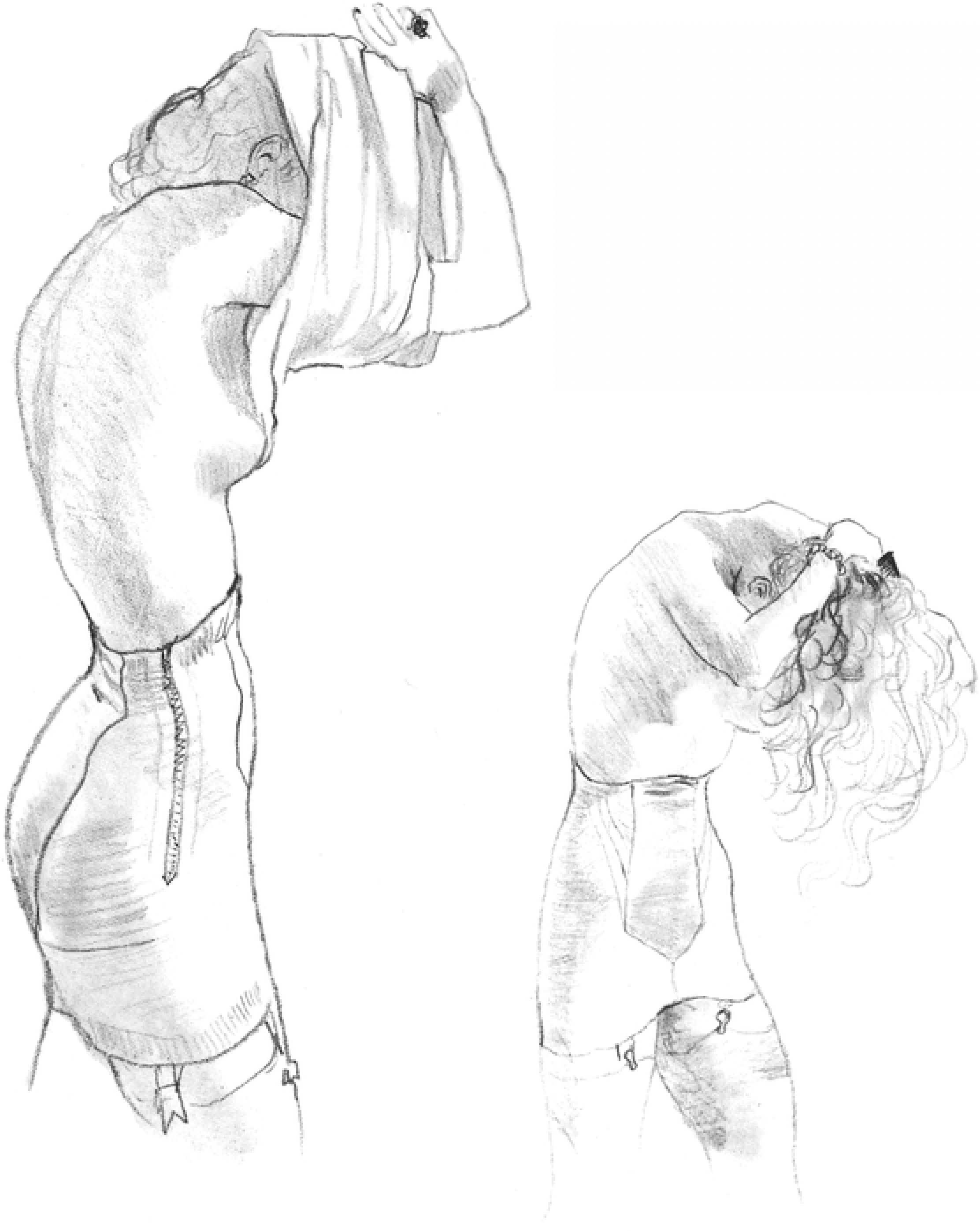
Actually, however, the painting of Toulouse–Lautrec (on the opposite page) is as much a drawing as it is a painting. Essentially it is a brush drawing in oil paints upon a neutral–colored background.

The fact that a work of art is done in many colors doesn't necessarily take it out of the realm of drawing. Pastels, for example, the medium Degas used in the picture above, have been used to draw and "paint" with. Thus a pastel is really both a drawing and a painting in dry chalky soft pencils. (See frontispiece color reproduction of drawing above.)

There are so many mediums one can draw with that it becomes impossible to mention all of them, to say nothing of describing them. The *head by Jack Levine was done with still another tool, a Japanese reed pen, a wooden instrument which dries quickly and makes double lines as it runs out of ink.*



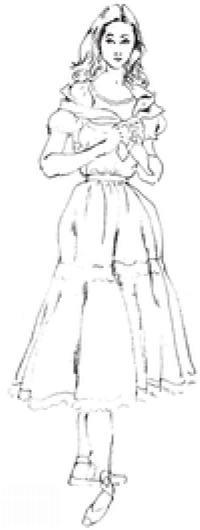
LEVINE



R. R. BODCHÉ. These drawings first appeared in "Vogue" and are reproduced here by courtesy of its editors. "Vogue" has been an important factor in establishing a high standard for fashion illustration. By encouraging and publishing the work of such artists as Carl Erickson (Eric), R. B. Willaumez (RBW), René Robert Bouché (RR Bouche'), and

Ruth Sigrid Grafström, it has attracted some of the best talent in the art field.

The Draped Figure



MORRISSEY

IF WE were to walk into any museum, we should be surprised at how few nudes have been painted and how the draped figure dominates the art field. The artist, as an interpreter of life, has always concerned himself primarily with the dressed human being. The stories, allegories, and portraits he has painted have always challenged his ability to portray a partially or fully draped figure well.

Stories, for the most part, deal with life as we know it and are concerned with people in their daily activities. The portrait makes a further demand upon the artist. He has always been expected to paint clothes meticulously and richly since they bear witness to the sitter’s position in society.

If the draped figure is what the artist draws most frequently, why should he study the nude and why are there countless drawings of the naked figure? The answer is simple. To draw a dressed form well, one must learn how to draw it undressed. A knowledge of the body is essential. Clothes become lifeless rags unless the form they drape is well realized.

FASHION

In our times fashion drawing is a very specialized field. Years ago there was no fashion drawing as we know it today. Before the age of specialization, the fine artist was expected to depict in his painting the highly styled garments of his period. The artist was essentially in the service of the wealthy and aristocratic classes who wore beautiful clothes and who expected to be revealed in gar–ments befitting their station in life.

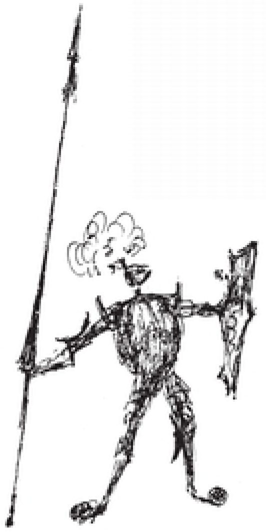
To name some of the finest fashion painters of the past is to mention the names of some of the greatest artists. Titian, Tintoretto, Raphael, Rubens, and Goya could paint clothes magnificently. Their eye for sex appeal, in female dress especially, was very keen. They knew how to drape a figure so as to give maximum emphasis to the very parts that make a man a man and a woman a woman. They knew how fashionable clothes functioned—that men and women wore them with a desire to display their sex characteristics to the best advantage. Women lowered their necklines, revealed the curves of their bosoms, and tightened their waistlines, while men padded their chests and shoulders and did everything to emphasize their masculine traits.

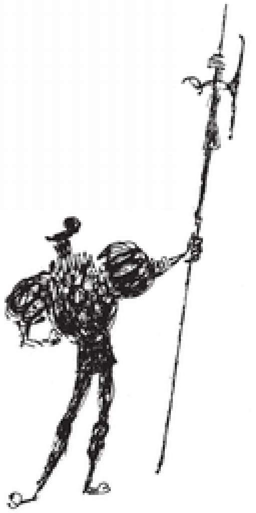
The normal desire to dress up for the opposite sex has not been less important in the past than it is today. Beyond the all-important function of protection, the major purpose of clothes has always been to display and emphasize the physical attractiveness of men and women. And just as now, so in the past the dress designers always came to the rescue, suppressing and emphasizing certain parts of the body to make them conform to the idea of beauty of a particular time and in a particular society. At times, padding became an obsession, and in such times breasts and hips grew out of all proportion. Then suddenly all padding would be discarded, the compression of forms would become an obsession, and breasts and hips would practically disappear.

Extreme changes in fashion have often taken place within one generation. But the periods when women tried to assume male characteristics such as mannish bobs, breast-lessness, and very slim hips (1918–1924 in Europe and America) have at all times been short-lived.

Now and then in the history of fashion clothes become rational. Instead of caricaturing any part of the body, they are made to enhance it—set it off—without compressing or exaggerating the natural form. And it is during these periods that an artist is happiest working in this field. In the United States today and in some countries of Europe, women’s clothes are not only made well but are draped intelligently and attractively. The form is neither excessively padded nor compressed. Compared with other periods in fashion history, reason seems to prevail. This, along with better pay and the encouragement of freer and more creative art work, has attracted to the fashion field as never before a number of very talented people who are well-grounded in the fine arts.

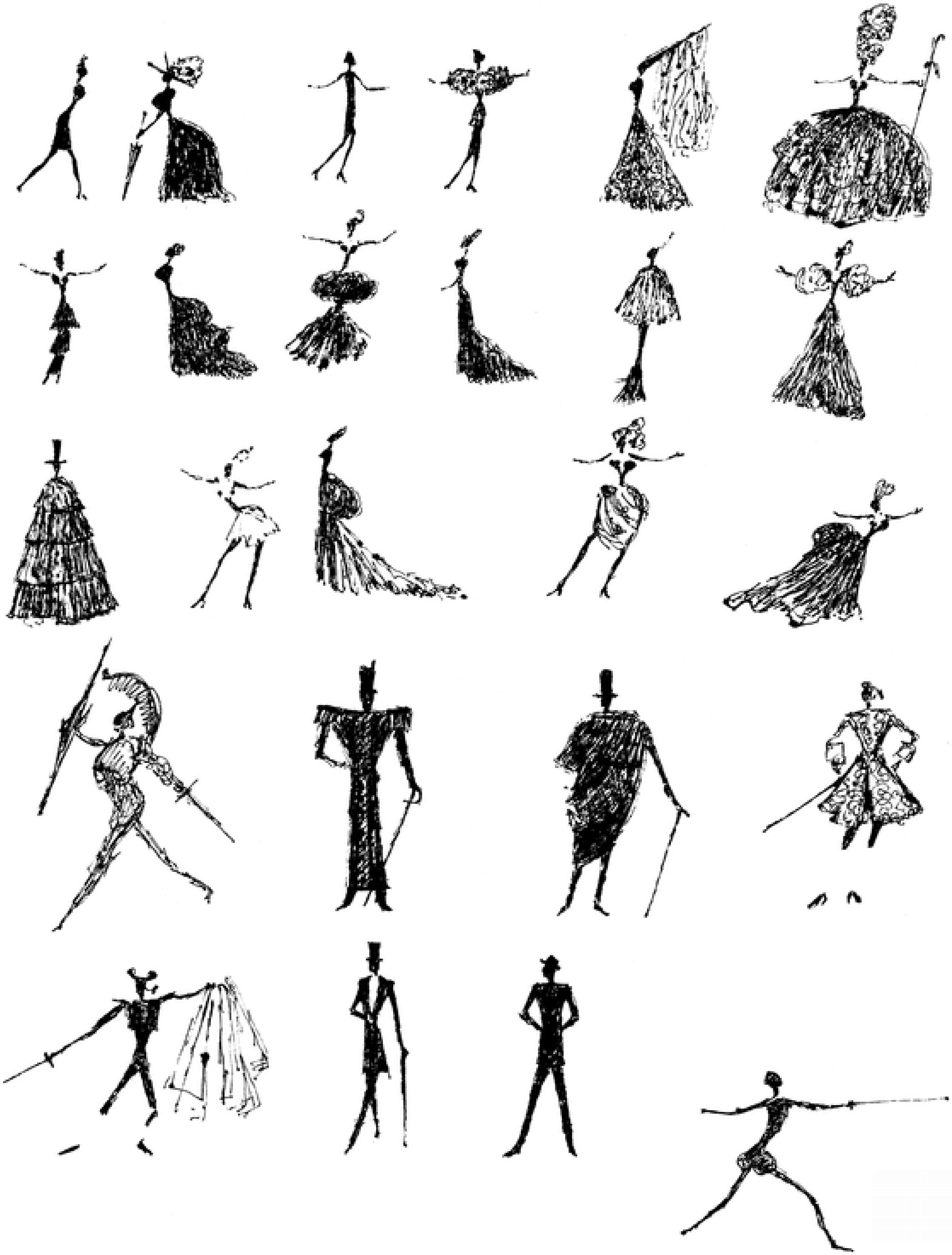
Today a good fashion figure is not merely a clotheshorse. It is the body of a woman keenly observed and well-drawn. Since it is usually rendered from life it is hardly ever formalized. Its structure is well realized. The poses are convincing and often even exciting. So important has good drawing become in this field that its artists often turn out a better figure than many a painter. But the limitations that the vogue imposes still prevent fashion drawing from being a true reflection of life. The mannequins are somehow never quite real. Obviously, they are not the people of Rembrandt, Goya, or Toulouse–Lautrec—real and alive. Very likely this is because the fashion field, even today, is too selective. The models are chosen to represent an infinitesimal seg- , ment of our society. Like hothouse flowers, they appear too fragile, too smart and artificial, never quite able to face real life and grapple with its problems.

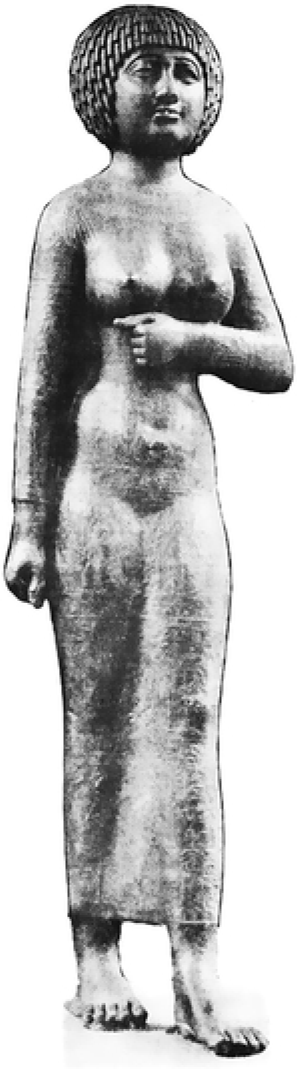




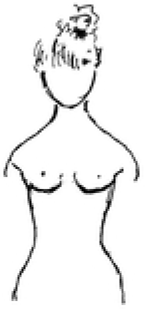
DOBKIN. Throughout the ages clothes have been designed to accentuate the “desirable” sex characteristics. In a female, attractive draping of the breasts and slenderizing of the waist have always been important problems for the dress designer. The year 1920 seems to be one of the few exceptions in the history of European dress design.

Height, wide shoulders, and slim waist and hips have been the desirable male characteristics. Consequently, his clothes have been built to broaden the shoulders and make him appear tall and slender around the waist and hips.

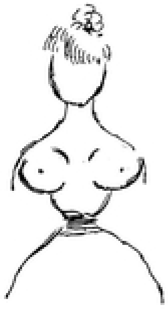




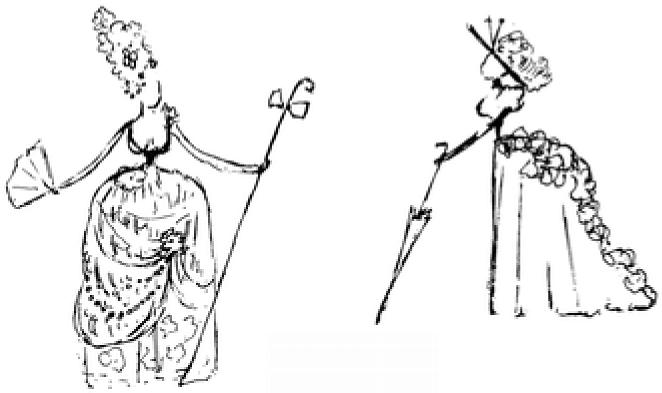
The concept of female beauty as por–trayed by Egyptian sculpture. Sheer and tightly designed garment reveal–ing the female form underneath has influenced the style of dress in many lands and in many different periods.



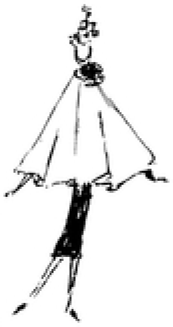
Natural contours



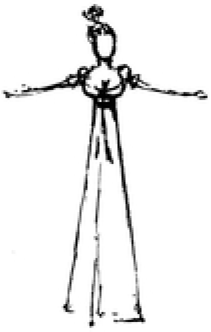
What happens when the waist is excessively tightened



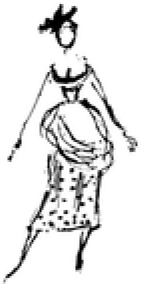
Very slim waist



Emphasizing slimness of the figure through contrast between loosely-covered top and tight-fitting skirt

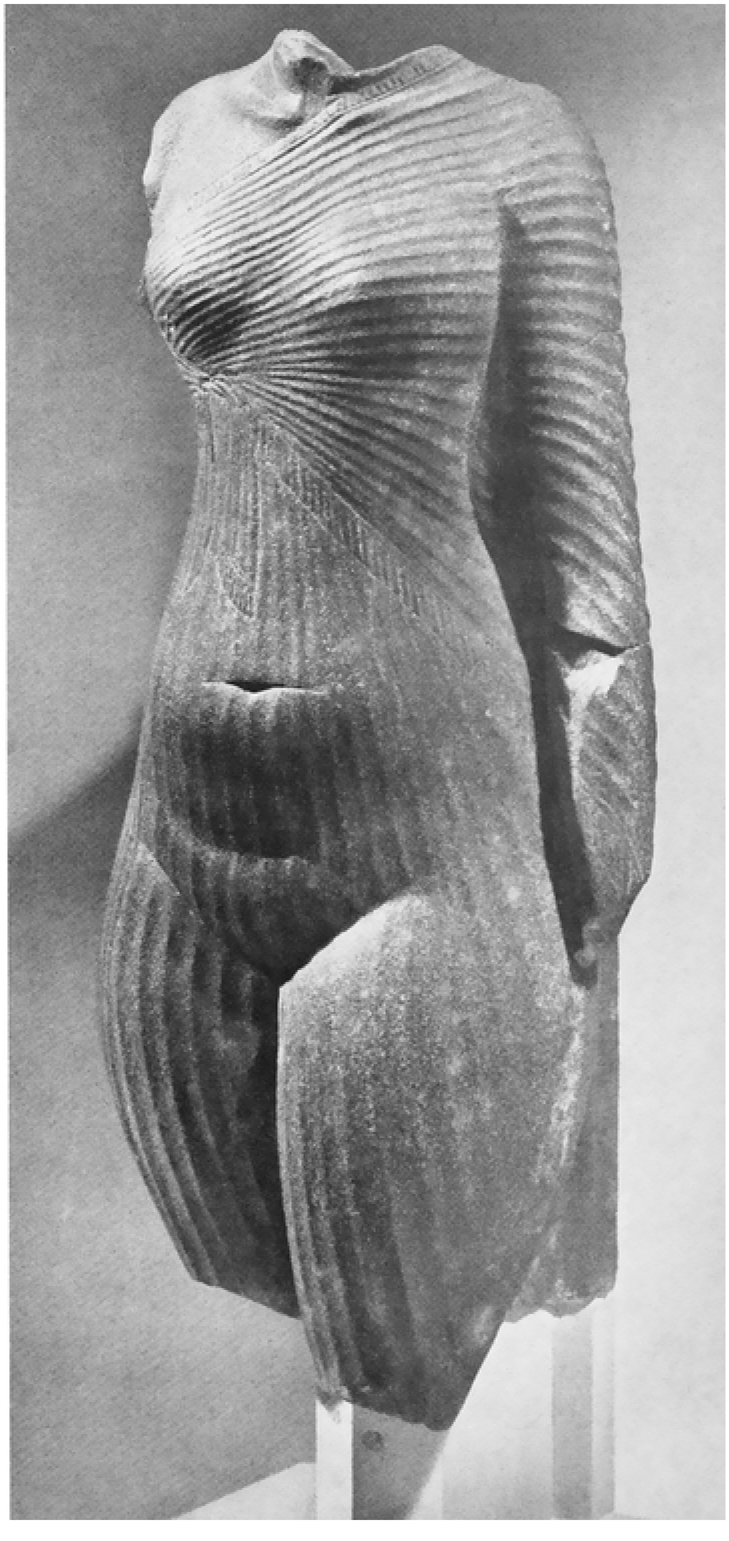


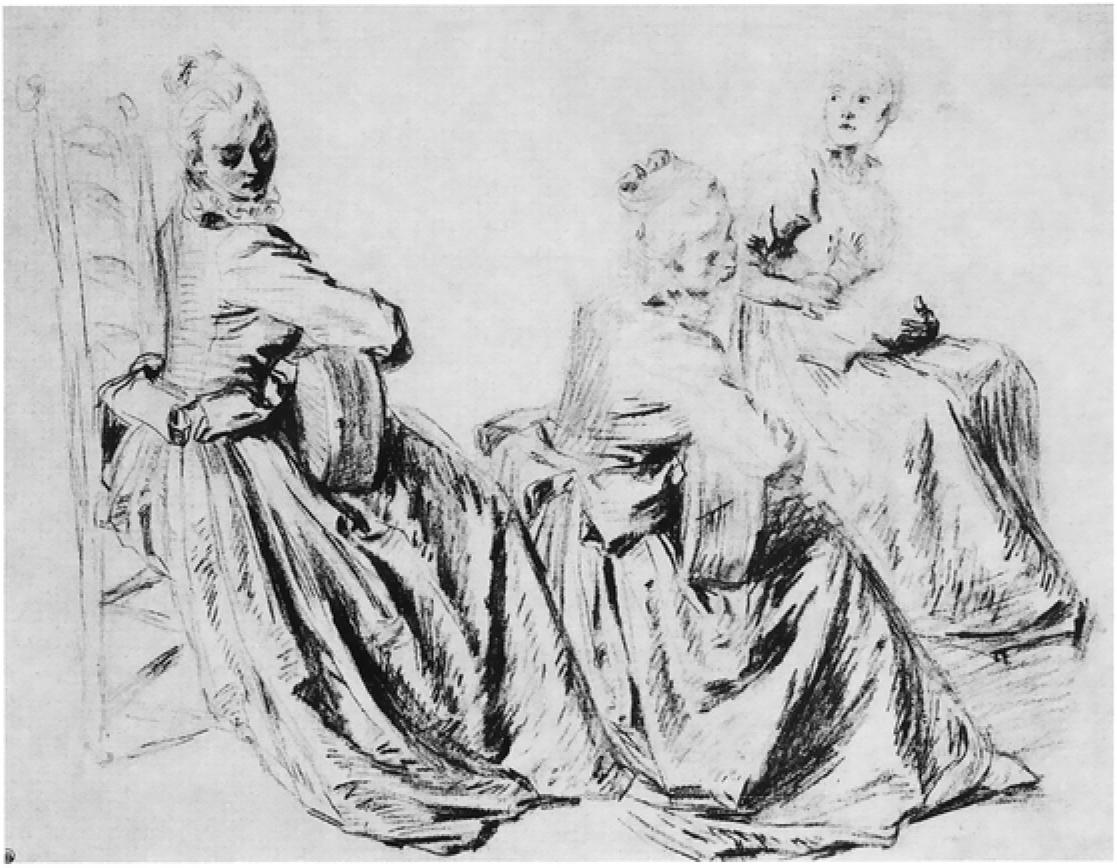
Greek influence, called neo-classic. High waist, lifted bosom



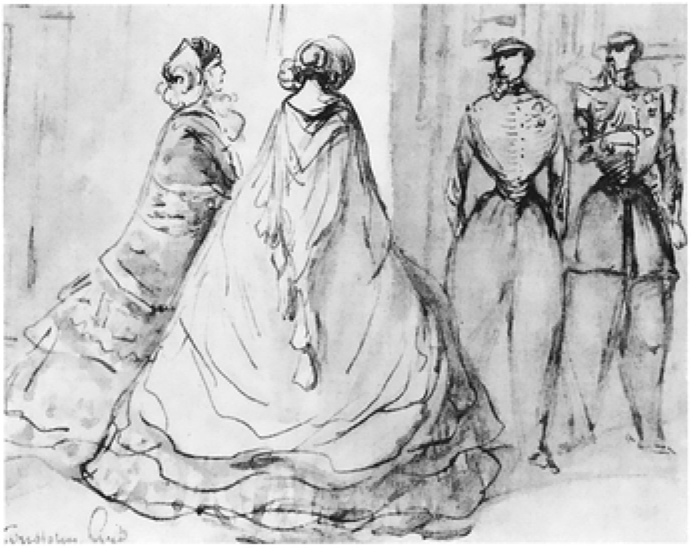
Attracting attention to the contours of the hips by decorative treatment in dress

In thousands of years very little has been done to match this Egyptian concept of a draped human form. It is remarkable how the clinging accordion pleats around the female figure accentuate her youthful beauty. The reason for reproducing this carving in the round is to add further proof to a point already stressed, that to drape a figure one must know how to draw it in the nude.

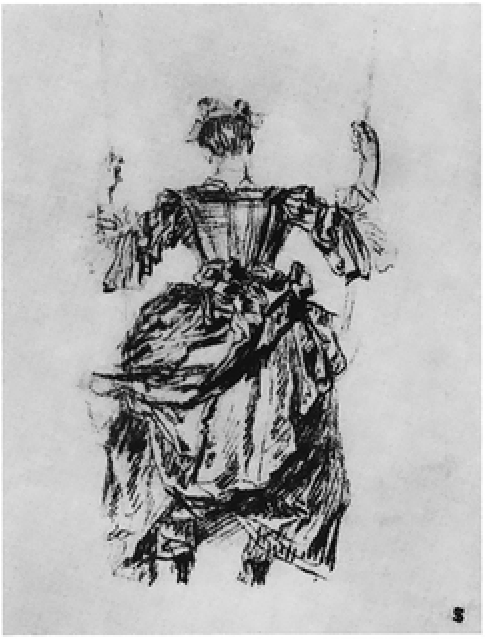




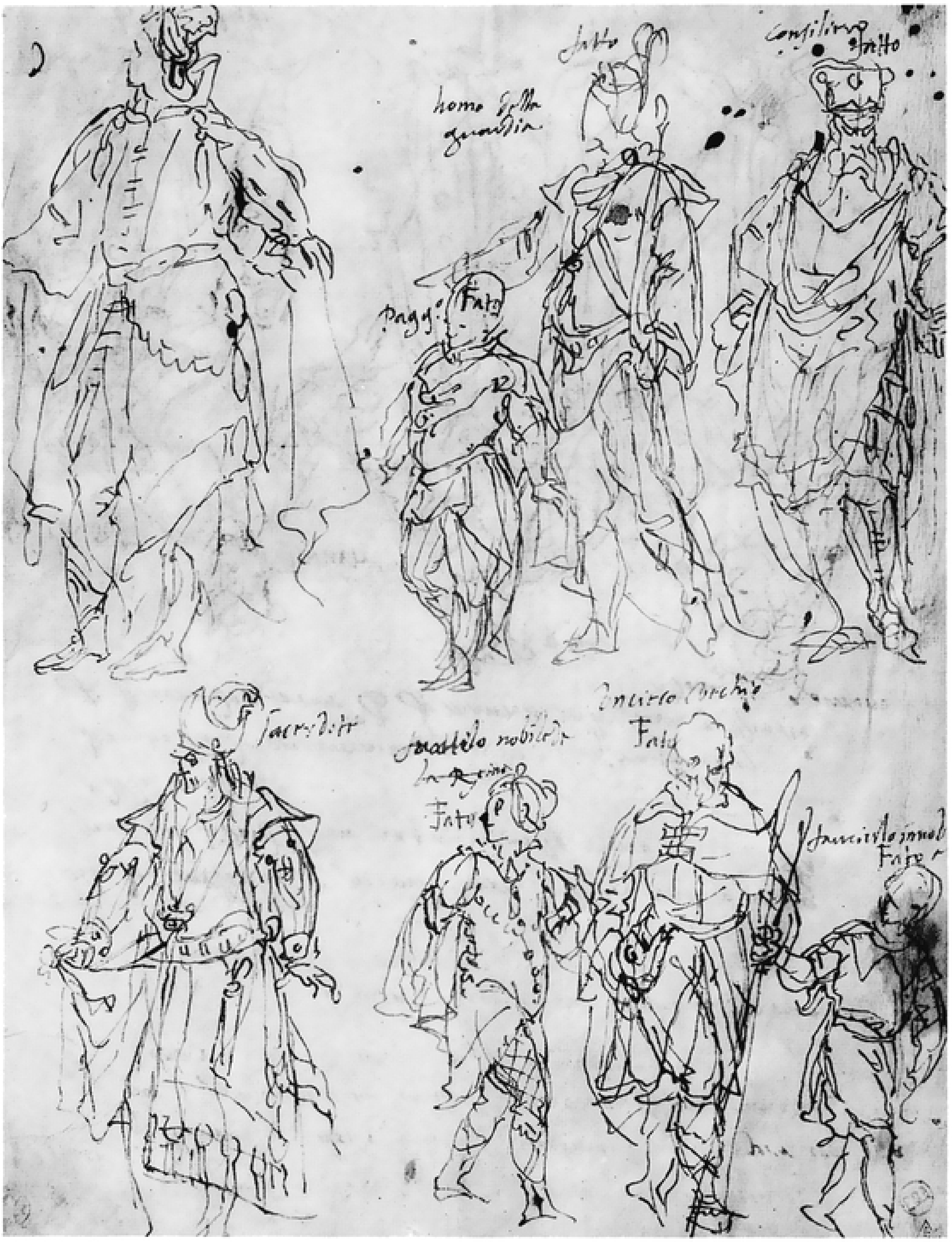
WATTEAU



GUYS



WATTEAU


Fatto
Consiliero Fatto
homo della guardia
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Sacerdote
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Fato
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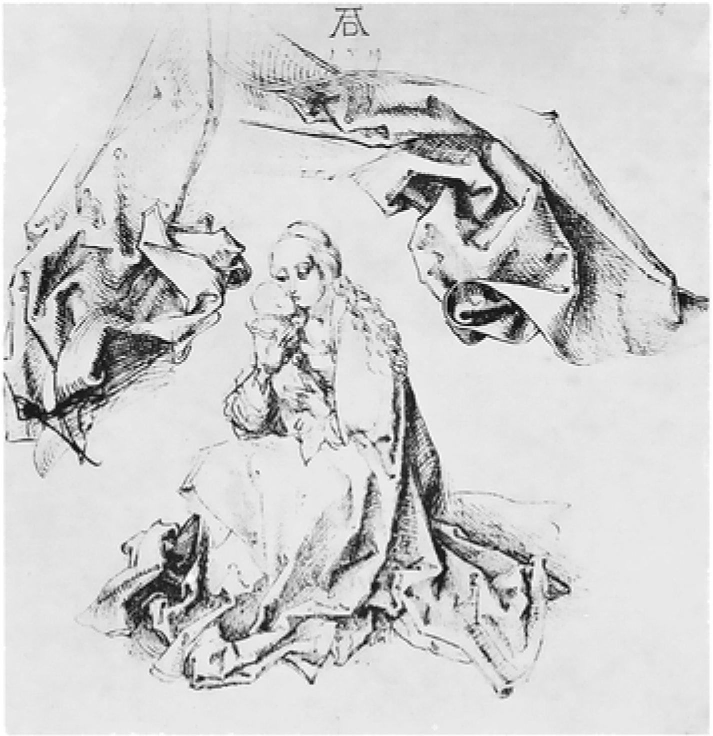
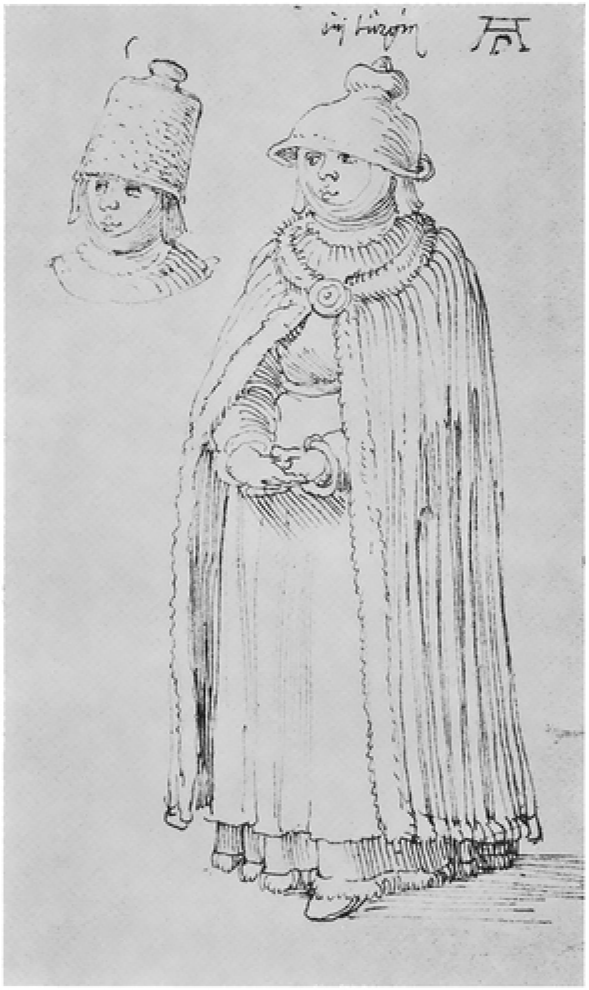
VERONESE



DÜRER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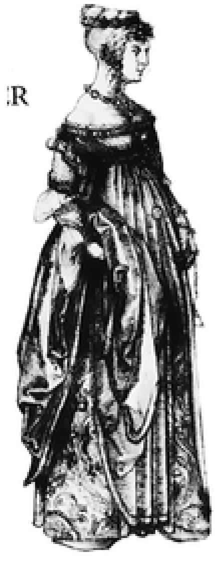
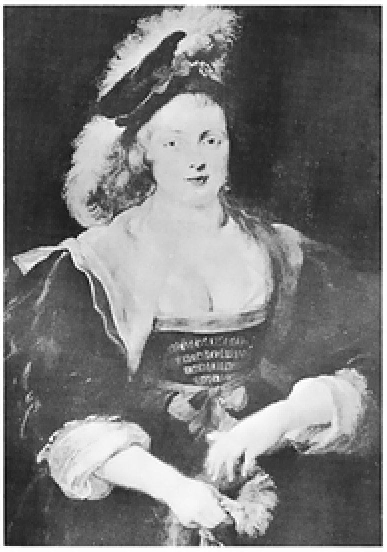
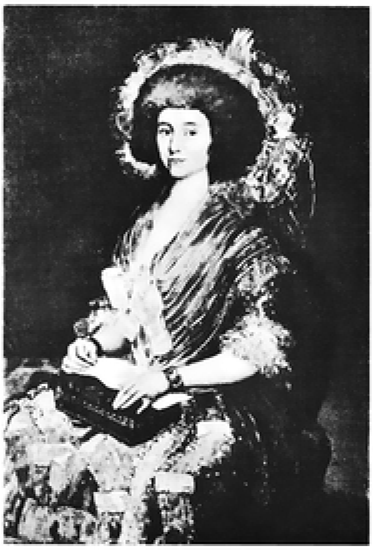
DÜRER



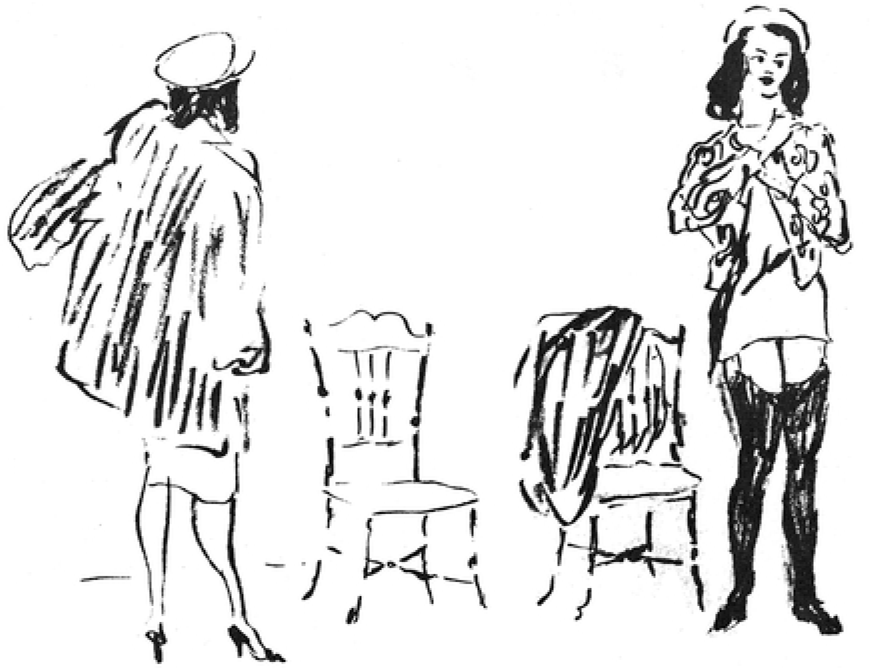
DÜRER

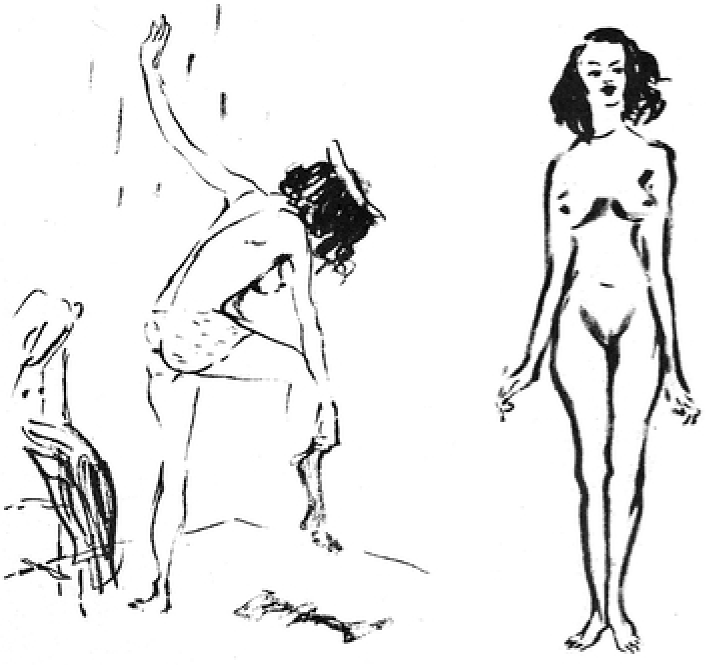


RUBENS

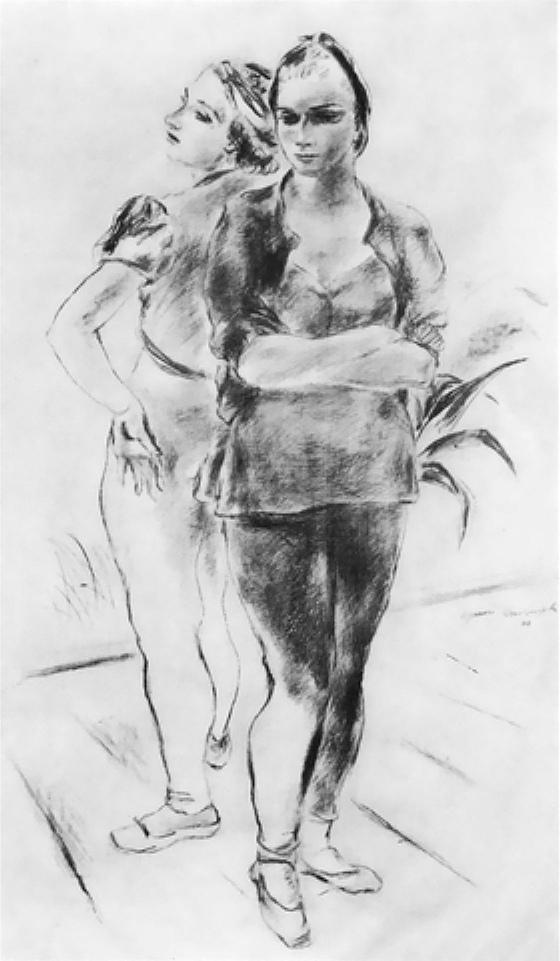


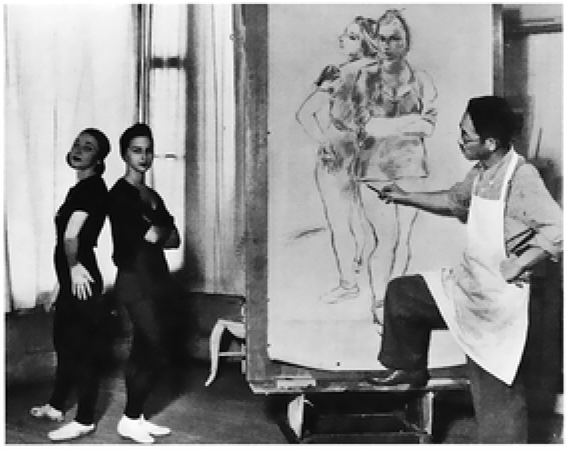
GOYA





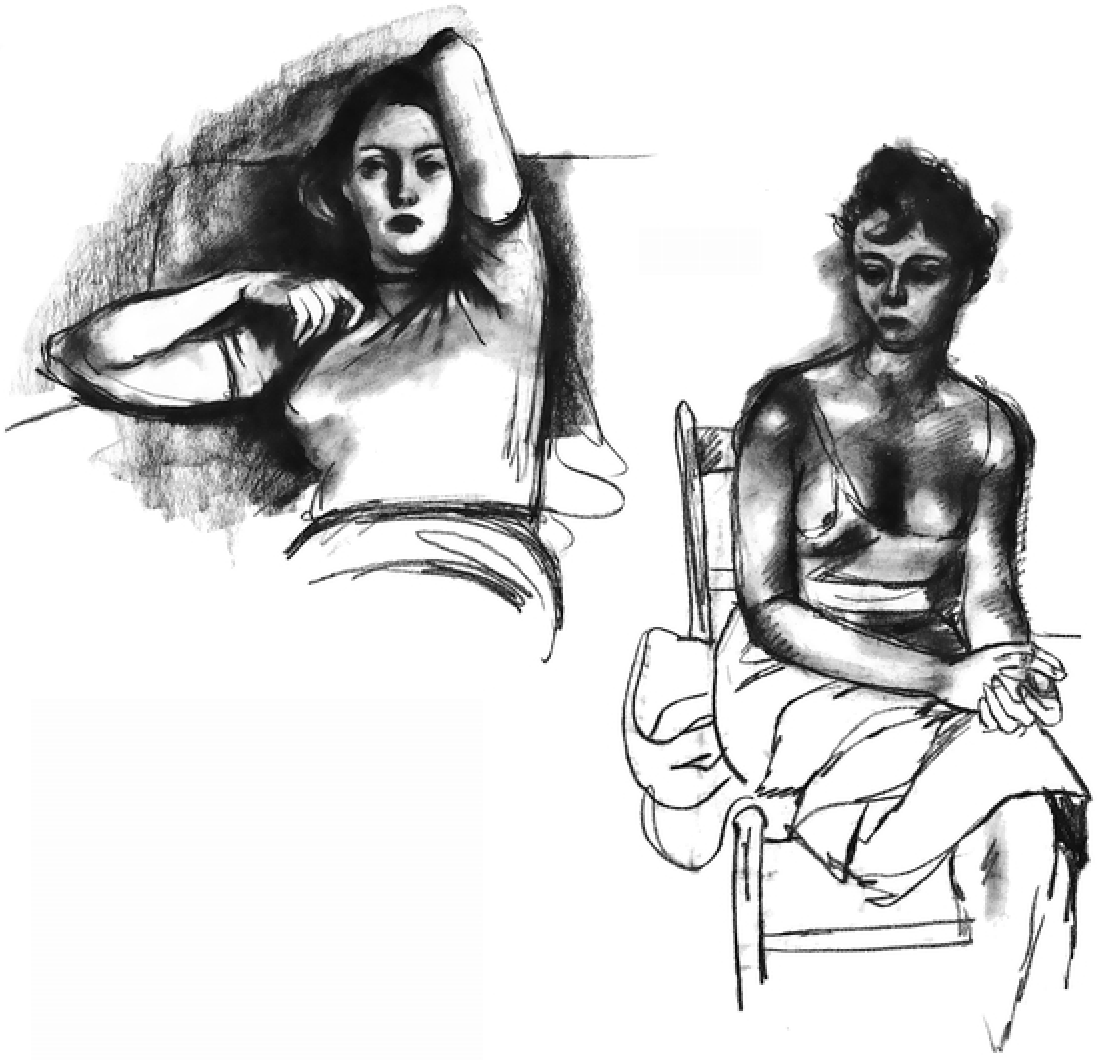
VERTÈS



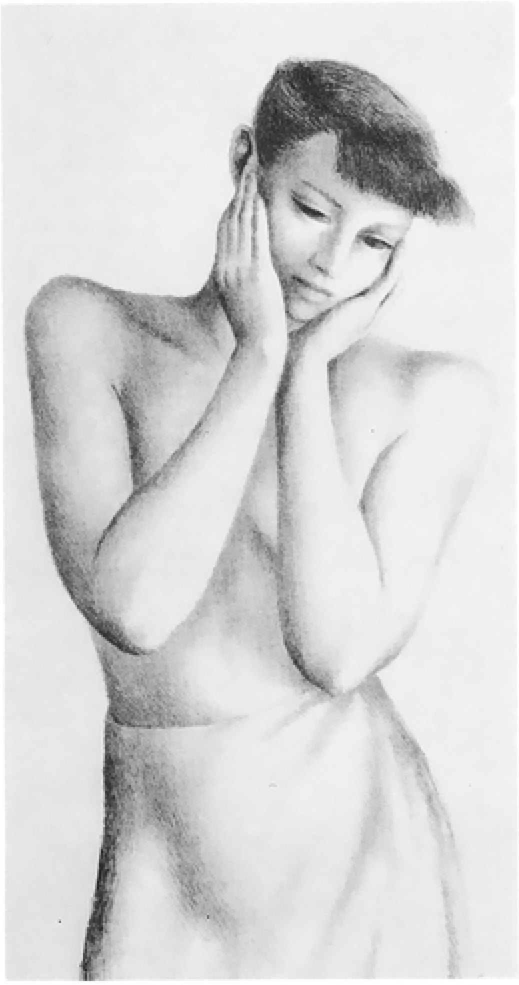


KUNIYOSHI. A drawing is seldom life-size or larger. But from the photograph below we can see that Yasuo Kuniyoshi’s drawing is at least life-size.

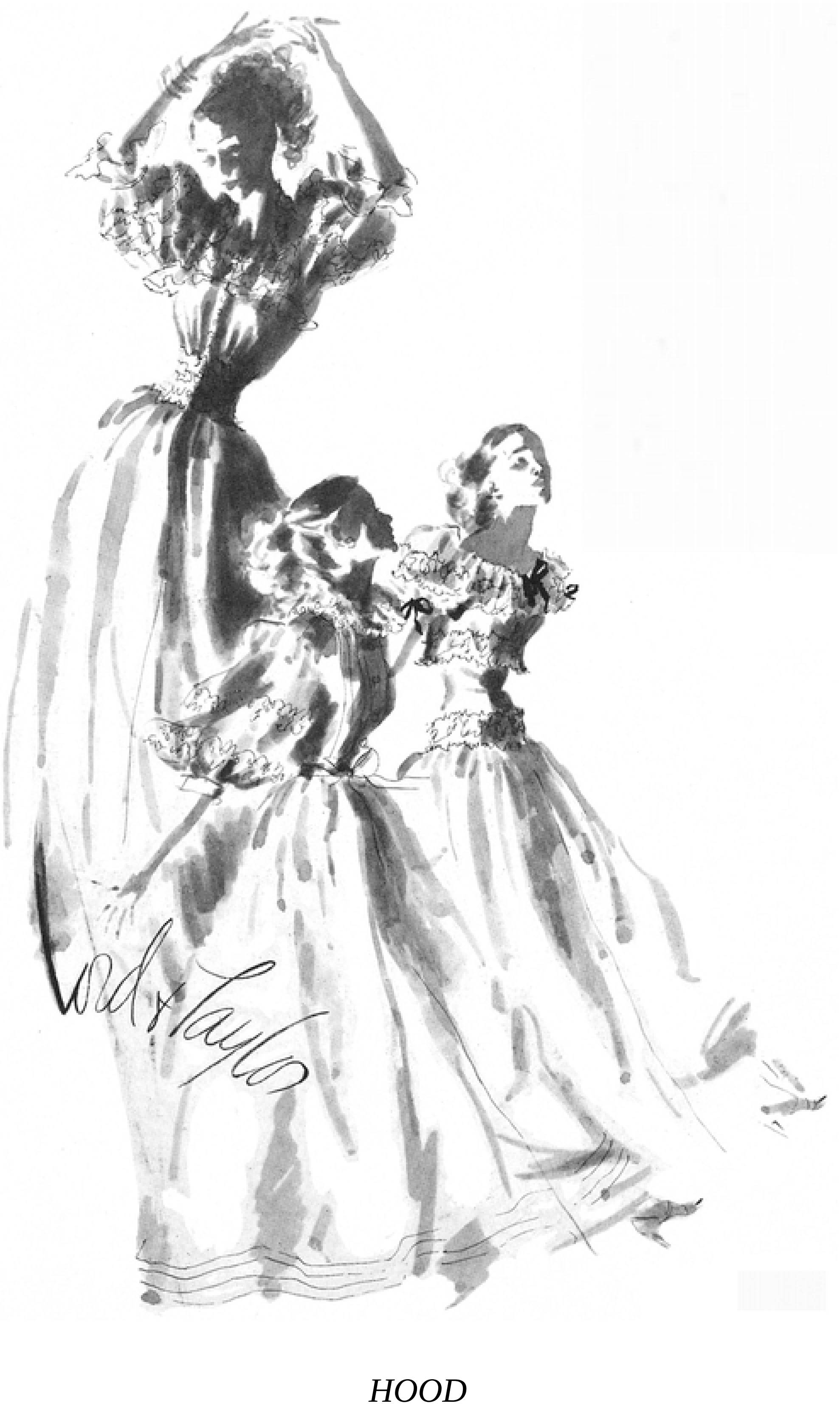
From the photograph we also observe how closely the drawing resembles the models, that the artist is using charcoal, and that the artist faces the model, never the easel. Instead he keeps his easel to the side and observes his subject closely.



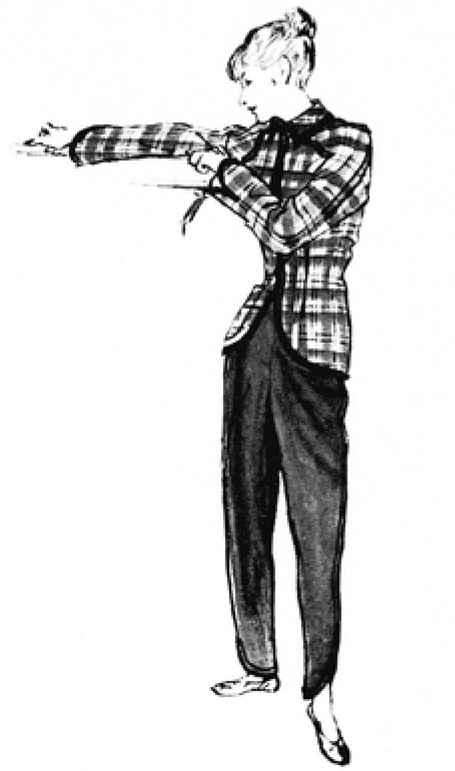
CIKOVSKY



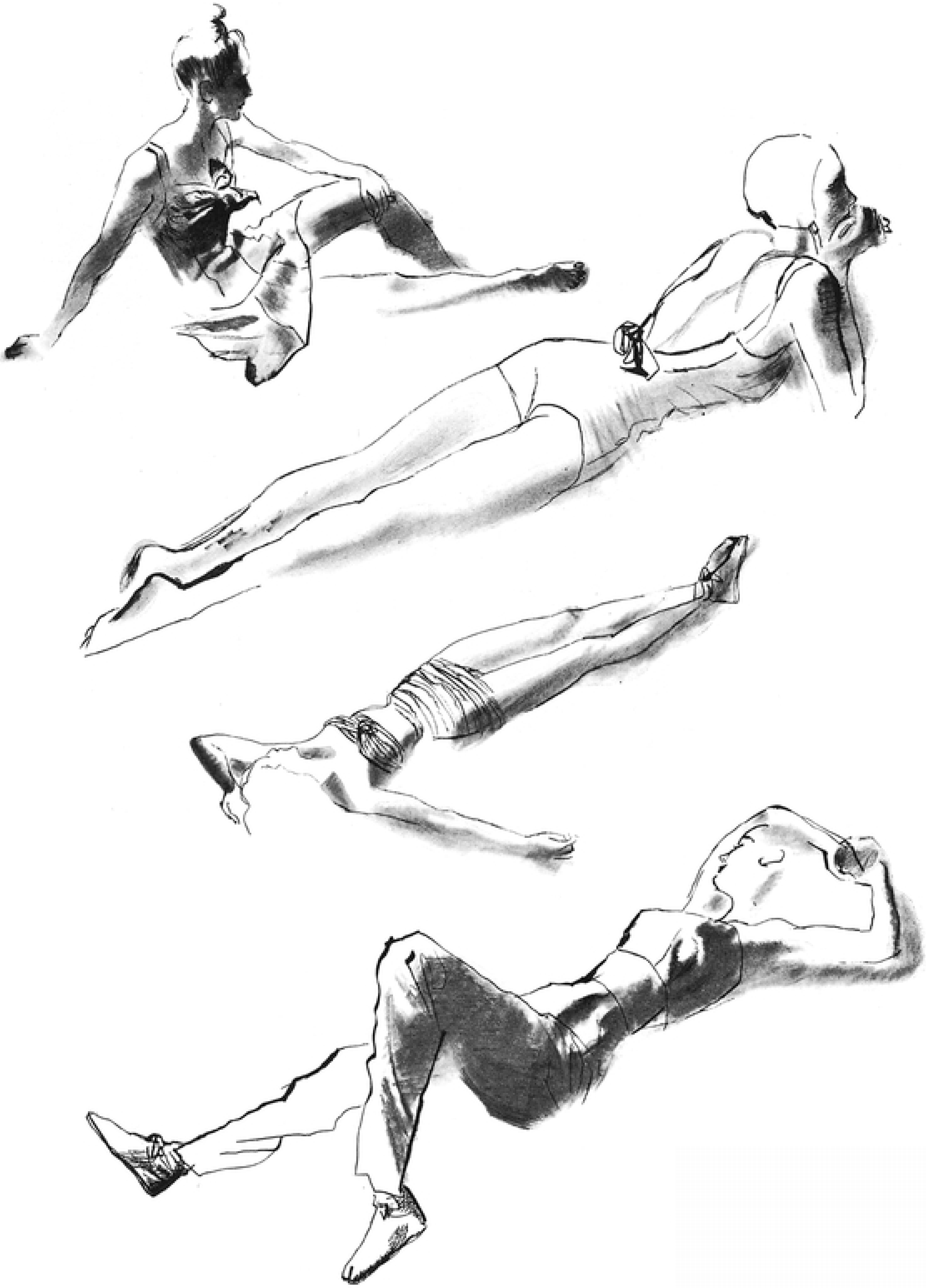
SPRUANCE



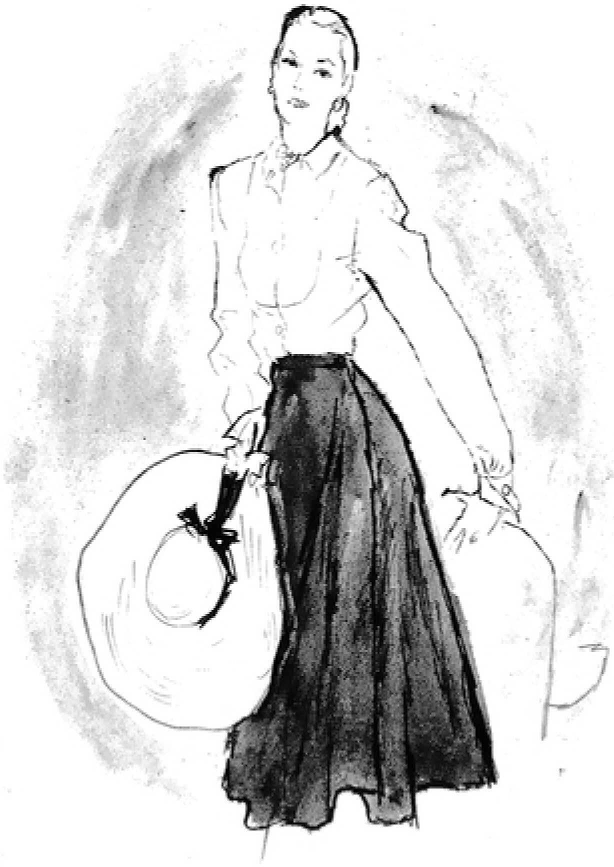
HOOD

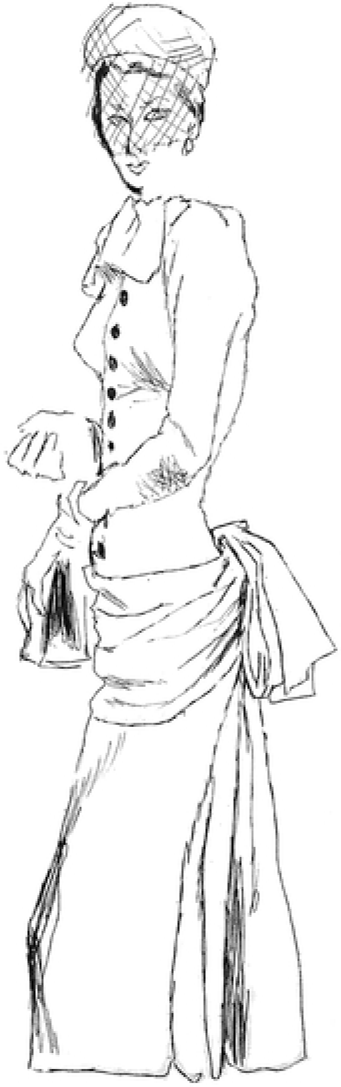


TURNER

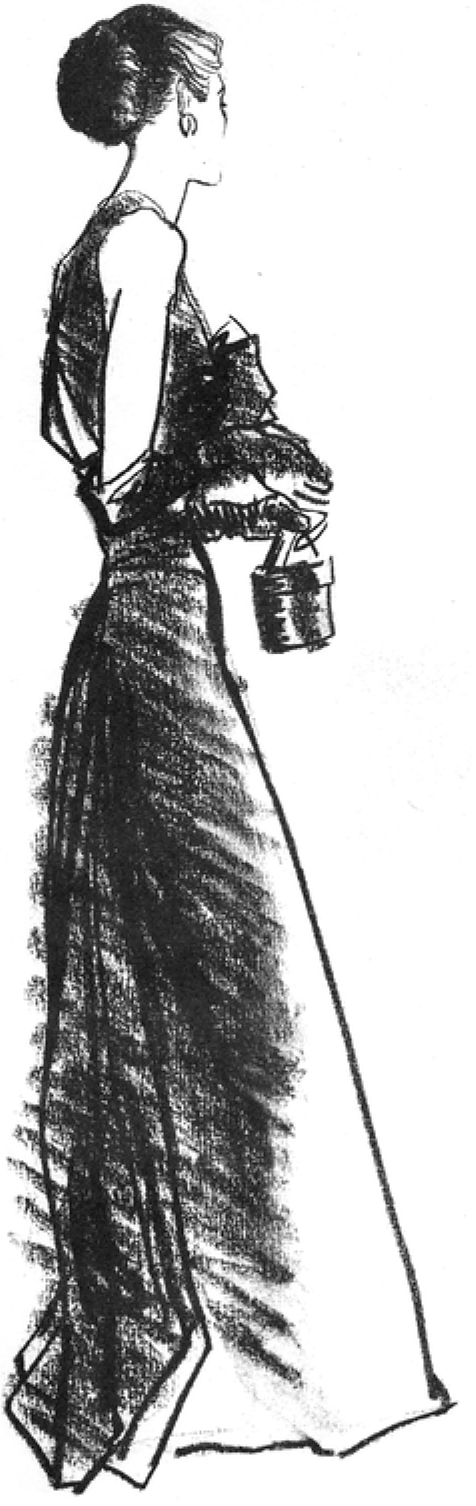


GRAFSTRÖM

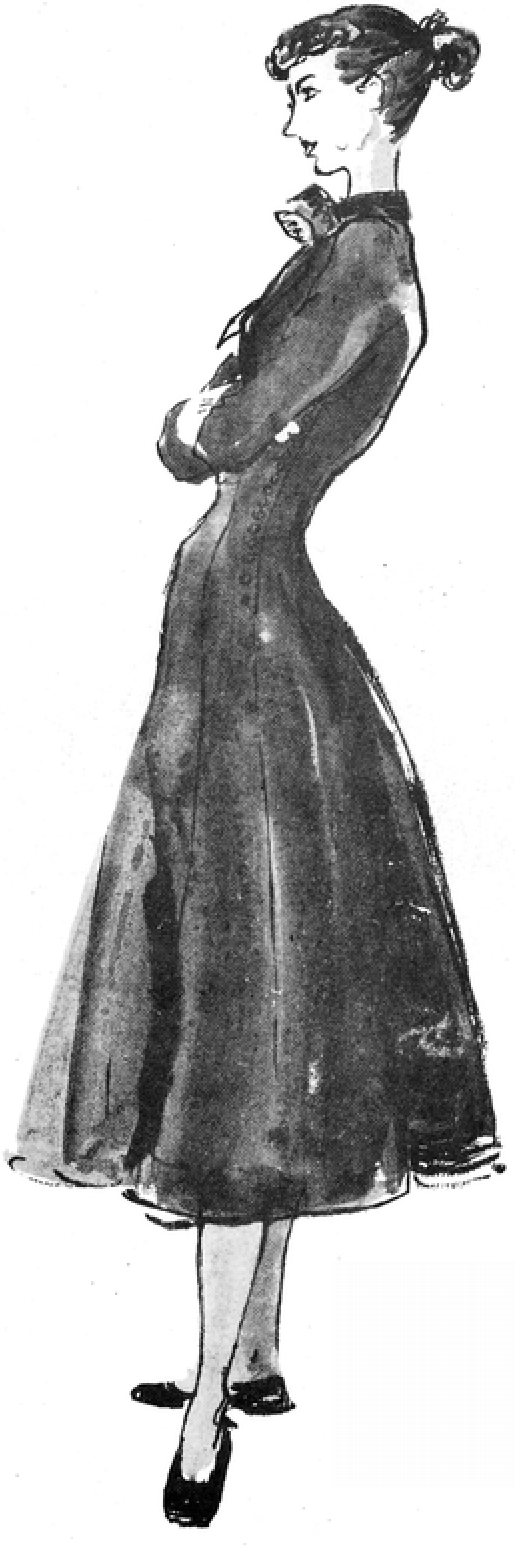




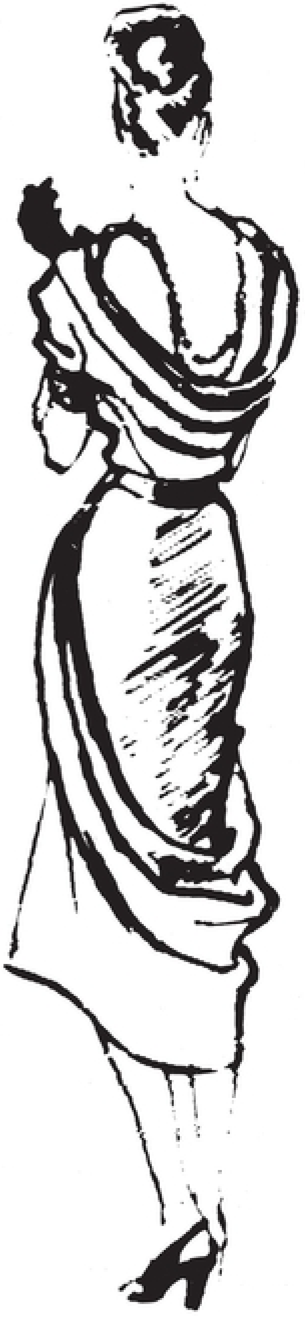
R. R. BOUCHÉ



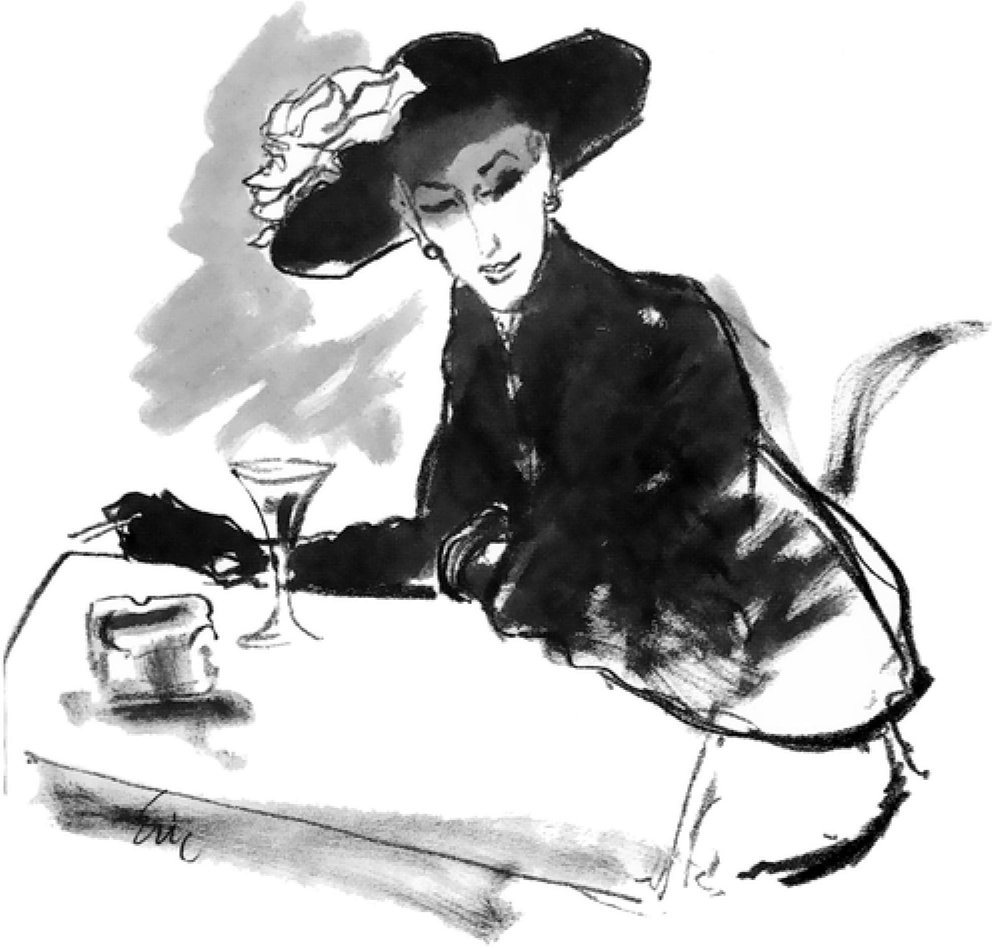
WILLAUMEZ



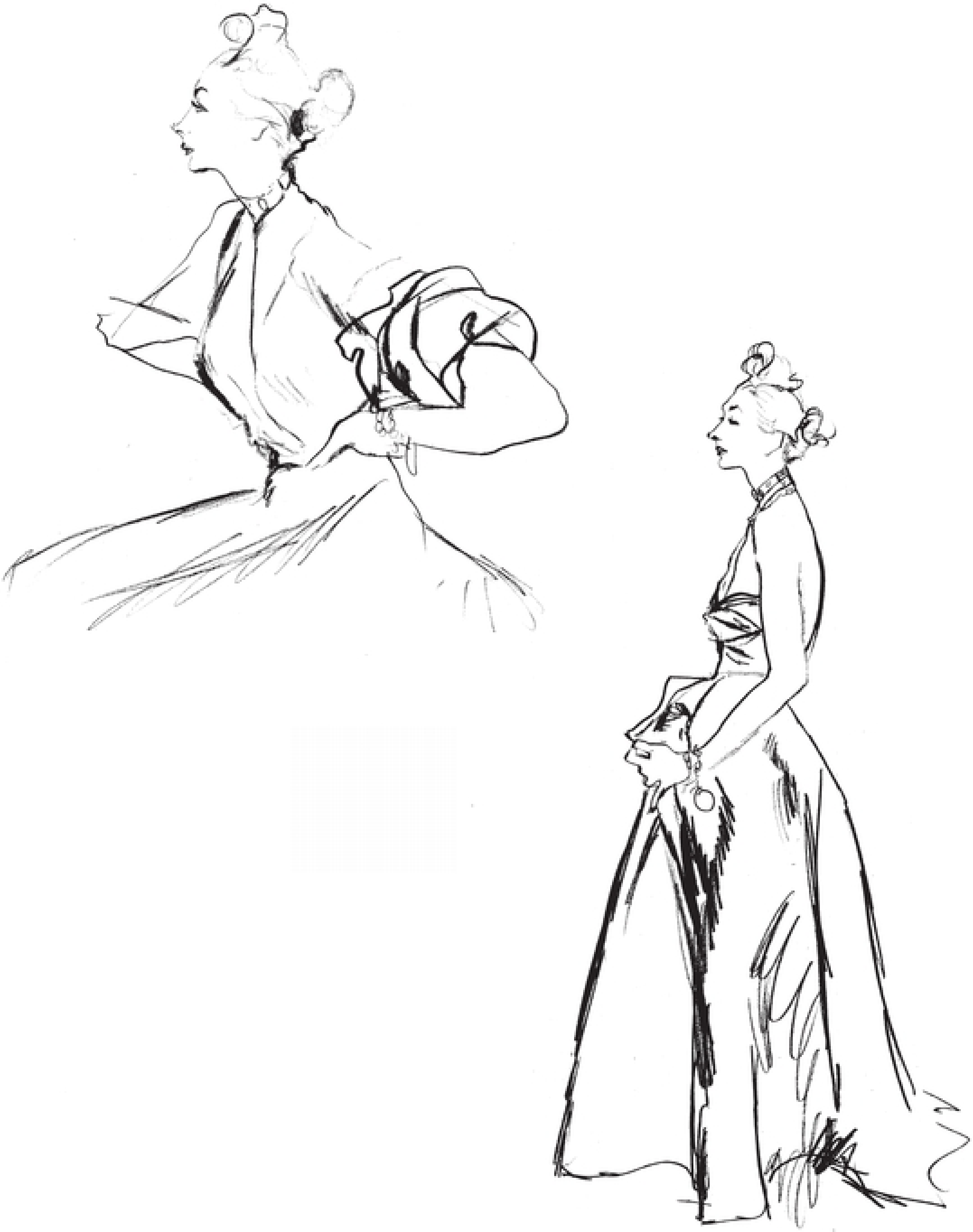
SOMERFELD



WILLAUMEZ



ERICKSON



ERICKSON

Conclusion

HAVING been connected with many art schools, I know that most art students are anxious to specialize and train themselves for an art industry. The desire and necessity for such training arise because art functions like any other modern industry, with division of labor requiring each highly skilled worker to perform but a fraction of the task involved in manufacturing a single product. And like any other industry, it requires the service of specialists.

No wonder, then, that our society no longer produces men like Leonardo da Vinci, a genius of all-embracing caliber who could paint as well as he could build, write, or do scientific research. In contrast, our geniuses are amazing specialists who are trained to function in but a small sphere of their profession. In answer to those who may still feel that the arts are “above it all” and should not be subject to mass production to the degree of specialization found elsewhere, I quote from the writings of Sidney Finkelstein, a noted art critic:

“Not only do the arts become highly specialized (in our society), but specialization rises to fantastic heights within each art. There are no longer painters but specialists in planes, specialists in formal designs, specialists in introspective psychology, specialists in color, specialists in textures, and innumerable other divisions of what was once the art of painting, each frequently made into a cult of the one ‘true art.’ ”

There is much truth in Mr. Finkelstein’s observation. Yet in this commercial world the painter is often looked upon as the least specialized individual. This attitude towards him is understandable because most people find it difficult to comprehend the full meaning of the term “specialization.” Because we see life as a struggle for security, we expect specialization to bring us, not less, but greater economic independence. Yet specialization without financial security is a fact. It exists in the creative artist. His training starts at an early age and continues until the very end of his creative life. His specialization lies in the deliberate and endless effort to sensitize and sharpen his visual sensibilities to life about him. But to see life, he, like Leonardo, must eventually widen his horizon. He must investigate. He must become a scientist—this time a social scientist.

What concerns us here are not the virtues or the evils of specialization, but rather the problems it poses for artists, students, and schools of fine and applied arts. Briefly stated, the problem is what kind of general background an art student should receive, how extensive it should be before he begins to specialize.

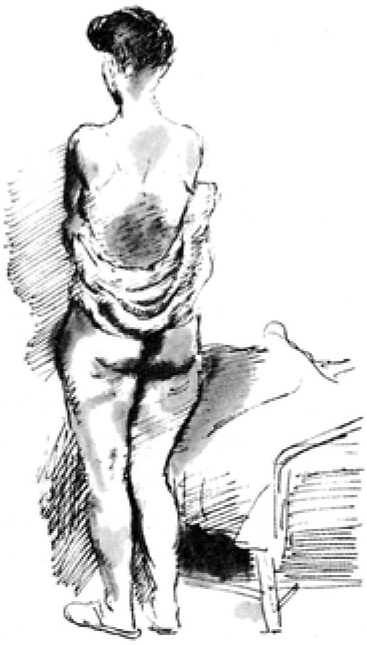
The training for any specialization in art should be fine art, as much of it as possible. As the laboratory is the backbone of all applied science, so fine art is the source of all applied art. Let us not deceive ourselves. The beginning of all art is found in the long history of man’s creative activity—a history covering thousands of years of art developed by modern and ancient civilizations. Therefore the knowledge of this history should constitute the basic training of all artists, fine and commercial alike.

Essentially, specialization should arise out of a broad study of art, should be a natural development of what interests the artist most, what he feels he can do best. It should grow out of an awareness of the art about him and a predilection for a specific applied art. This kind of awareness and interest can develop only when one’s point of view and ideas are given time to percolate and mature. Premature decision to specialize often leads to a hopeless impasse: a deadly job, a monotonous routine, a stagnation due to poor basic training and consequent lack of the resourcefulness so essential in coping with new problems and ideas.

Today the successful men in commercial art are people who at one time or another have been painters. To their newly chosen fields they bring knowledge and art resources never before drawn upon. Because of their richer background, they approach their new problems with better understanding of design, a fresher attitude, and an authority that inevitably grows out of the understanding of the various traditions of art. The gain is mutual. Commercial art gains stature, scope, and dignity, and artists gain a sense of fulfillment from working in fields that open new possibilities for self-development. Consequently, although art directors prefer men who know their business, and who are trained to perform technical tasks well, they are always on the lookout for men who have something original to contribute.

What helped me most in illustrating Zola's *Nana* was not a course in illustration, which I never took, but my understanding of the period derived from the work of certain artists. One thing was plain to me. If one wanted to meet Nana, all one had to do, after having read the book, was to look at the paintings and drawings of such artists as Manet, Toulouse-Lautrec, and Degas, where she appears over and over again, not only in portrait form but also in her environment. Here the places she frequented and the men and women she lived with are pictured with such remarkable reality and vividness that one feels as though one has been among them. And it is this feeling—the feeling of being among the characters in the book—that makes it possible to portray them convincingly. That is the first prerequisite for an illustrator. Everything else follows. If he draws well and possesses imagination, specialization becomes a natural process of developing the ability to translate verbal images into visual forms.

This book is designed to be useful to a broad section of people who are interested in art. It can be useful to those who wish to study the structure of man, the anatomy essentially based on the Renaissance idea of the human form. It can help those who seek to improve their drawing, not through vulgarized shortcuts and dogmas, but through finding themselves by developing their own natural way to draw. And finally, because it contains art work of many periods—a collection of drawings of some of the greatest artists that ever lived—it can also be used as a source book by artists, teachers, students, and art lovers alike.



RAPHAEL SOYER

ACKNOWLEDGMENTS
AND
INDEX OF ARTISTS

ACKNOWLEDGMENTS

I WISH to express my gratitude to Abe Lerner, whose friendship and close association I have enjoyed for many years; toward the end of my task it was he who helped me put the finishing touches on the manuscript by editing it and aiding me in the final selection of the drawings. My wife Mabel has likewise been of considerable assistance in collecting and selecting the many illustrations, as well as in editing and proofreading the copy.

To Dr. Joseph C. Ehrlich of Lebanon Hospital I am grateful for the medical knowledge which he contributed in checking the diagrams and the passages relating to anatomy.

I naturally feel indebted to my teachers who taught me the principles of human anatomy. Among them were Professors Charles J. Martin and Arthur R.Young of Teachers College, Columbia University; George W. Eggers of City College; and the late Dr. Leigh Hunt of City College and George B. Bridgman of the Art Students League.

I also wish to thank all the contemporary American artists, my dear friends and those whom I know only by name, who have so generously loaned me many originals.

And finally, a book such as this would have been impossible to write without the museums, art galleries, and magazines which provided me with photographs and, in very many cases, originals of great value.

ALEXANDER DOBKIN

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Frontispiece. Edgar Degas. Courtesy of Mr. Herbert H. Elfers, Durand–Ruel Galleries, New York.

p. 7. Auguste Rodin. Buchholz Gallery, New York.

9. Jan Stephan van Calcar. From *De Humani Corporis Fabrica* by Andrea Vesalius. The Metropolitan Museum of Art, New York.

12. Nicolas Poussin. Drawing, Lille. Painting, Chantilly.

14. Leonardo da Vinci. The Pierpont Morgan Library, New York.

15. Leonardo da Vinci. Fig. 1, The Pierpont Morgan Library, New York. Fig. 2, Academia, Venice.

16. From Richer. Figs. 3 and 4 from *Anatomy for Artists* by Eugene Wolff. By permission of The Macmillan Company, publishers.

18. Jan Stephan van Calcar. From De *Humani Corporis Fabrica* by Andrea Vesalius. The Metropolitan Museum of Art, New York.

23. Moses Soyer. Collection of Mr. and Mrs. Michael M. Ware, New York.

26. Michelangelo. Study for Sistine fresco. Louvre, Paris.

29. Michelangelo. Louvre, Paris.

30. Michelangelo. *Top,* British Museum, London. *Bottom left,* Casa Buonarroti, Florence. *Bottom right,* Tayler Museum, Haarlem.

31. Michelangelo. British Museum, London.

34. Jan Stephan van Calcar. From De *Humani Corporis Fabrica* by Andrea Vesalius. The Metropolitan Museum of Art, New York.

37. Leon Kroll. Cone Collection, Baltimore.

38. Emil Ganso. Weyhe Gallery, New York.

41. Henri de Toulouse-Lautrec. Albi Museum.

42. Leonardo da Vinci. Royal Library, Windsor.

50. Michelangelo. *David.* Académie, Florence.

54. Albrecht Dürer. Top, British Museum, London. *Bottom right,* Albertina, Vienna.

56–57. Matthias Grünewald. Unterlinden Museum, Colmar.

59. Leonardo da Vinci. Royal Library, Windsor.

60. Leonardo da Vinci. Royal Library, Windsor.

61. Michelangelo. Ashmolean Museum, Oxford.

62. Alexander Dobkin. *Bottom,* Collection of Mr. and Mrs. William Targ, New York.

63. Honoré Daumier. Photo by David Rosen. Courtesy *Magazine of Art.*

70. Peter Paul Rubens. Louvre, Paris.

71. Egyptian sculpture. The Metropolitan Museum of Art, New York.

73. Franz Xavier Messerschmidt. Barockmuseum, Vienna.

74. Francisco Goya. Prado, Madrid. Rembrandt van Rijn. Capetown Museum, South Africa.

78. Sandro Botticelli. Uffizi, Florence. Lucas Cranach, the Elder. Collection of Franz Koenig, Haarlem. Leonardo da Vinci. Royal Library, Turin.

79. Jean Antoine Watteau. *Lower right,* The Metropolitan Museum of Art, New York.

80. Michelangelo. Casa Buonarroti, Florence. Leonardo da Vinci. *Top right,* Kunsthalle, Hamburg. *Center right,* Royal Library, Windsor. *Bottom,* Museum of Fine Arts, Budapest.

81. Peter Paul Rubens. Albertina, Vienna. Gerard David. Louvre, Paris. Unknown Master, Northern School. Albertina, Vienna.

82. El Greco. Pinakothek, Munich. Henri Matisse. Pierre Matisse Gallery, New York. Kaethe Kollwitz. Lithograph, Galerie St. Etienne, New York. Dry point, Collection of Dr. and Mrs. Bernard S. Feinberg, New York.

90. Greek sculpture, National Museum, Rome. Dean Fausett. Kraushaar Gallery, New York.

92. Peter Paul Rubens, inset. Kunsthistorisches Museum, Vienna.

93. Pierre Auguste Renoir, *inset.* Wildenstein and Company, New York.

94. François Boucher. *Top,* Paul J. Sachs Collection, Fogg Museum of Art, Harvard University. *Bottom,* National Museum, Stockholm.

95. Michelangelo. *Top,* Albertina, Vienna. *Bottom left,* Louvre, Paris.

97. Jon Corbino. *Top left,* The Metropolitan Museum of Art, New York. Eugene Speicher. *Bottom right,* The Metropolitan Museum of Art, New York.

98. Henri Matisse. Top, Collection of Moses Soyer, New York. *Center and bottom right,* Pierre Matisse Gallery, New York.

100. Augustus John. The Metropolitan Museum of Art, New York.

110. Reginald Marsh. Frank K. M. Rehn Gallery, New York.

112. William J. Glackens. Kraushaar Gallery, New York.

113. Louis Bouché. Kraushaar Gallery, New York.

114. Harry Schnakenberg. Kraushaar Gallery, New York.

115. Mahonri Young. Kraushaar Gallery, New York.

116. George Bellows. The Metropolitan Museum of Art, New York.

117. John Groth. *Bottom three.* Illustrations for *Men Without Women* by Ernest Hemingway, The Living Library (Cleveland and New York: The World Publishing Company).

120. François Boucher. British Museum, London. Edgar Degas. Collection of Henry Lerolle.

121. Jon Corbino. Kleemann Gallery, New York.

124. Edgar Degas. Photograph. Courtesy of Durand–Ruel Galleries, New York.

124–125. Edgar Degas. *Top,* Cleveland Museum of Art.

125. Edgar Degas. *Bottom,* The Metropolitan Muse–um of Art, New York.

126. Michelangelo. Royal Library, Windsor. Albrecht Dürer. Bonnat Museum, Bayonne.

127. Francisco Goya. The Hispanic Society of Ameri–ca.

128. Honoré Daumier. *Top,* Collection of Maurice Magnin, Paris. *Center,* Louvre, Paris. Edgar Degas. Buchholz Gallery, New York.

129. Honoré Daumier. *Center,* Collection of William A. Clark.

130. Leon Kroll. *Top,* Collection of Aldus C. Higgins, Worcester, Massachusetts.

131. Eugene Speicher. Frank K. M. Rehn Gallery, New York.

132. Jean Antoine Watteau. The Pierpont Morgan Library, New York.

134. Pablo Picasso. Buchholz Gallery, New York.

146. Pablo Picasso. *Top,* Paul Rosenberg and Company, New York. *Bottom,* Museum of Modem Art, New York.

147. Pablo Picasso. Collection of Mabel Mount.

148. Pablo Picasso. *Top,* Paul Rosenberg and Company, New York. *Bottom,* Collection of Alexander Dobkin, New York.

149. Henri Matisse. Pierre Matisse Gallery, New York.

150–151. Jules Pascin. Collection of Mr. and Mrs. Alexander Dobkin.

154. Moses Soyer. Collection of Alexander Dobkin, New York.

155. Michelangelo. British Museum, London. Henri Matisse. The Metropolitan Museum of Art, New York.

158. Honoré Daumier. *Top,* Barbizon House, London. *Bottom,* Collection of Maurice Gobin, Paris.

159. Honoré Daumier. *Center,* Collection of Claude Roger-Marx, Paris.

160–161. John Groth. Illustrations for The *Grapes* of *Wrath* by John Steinbeck, The Living Library (Cleveland and New York: The World Publishing Company).

162. Rembrandt van Rijn. Top, Berlin. *Bottom,* Stockholm.

163. Rembrandt van Rijn. Dresden.

164. Michelangelo. Louvre, Paris.

165. Salvador Dali. Collection of Mr. and Mrs. William Targ, New York. Leonardo da Vinci. British Museum, London.

166. Leonardo da Vinci. Royal Library, Windsor. Honoré Daumier. Collection of Claude Roger-Marx, Paris.

168. Michelangelo. *Top,* Louvre, Paris. *Lower right,* Casa Buonarroti, Florence. *Lower left,* San Lorenzo, Florence.

169. Michelangelo. *Lower right,* Sistine Chapel.

170. Aristide Maillol. *Top,* Collection of Dr. Willy Räber, Basel. *Bottom,* Collection of Halmloser, Winterthur.

173. Lucas Cranach, the Elder. Top, Landesmuseum zu Braunschweig. *Bottom,* The Metropolitan Museum of Art, New York.

177. Alexander Dobkin. Illustrations for *Nana* by Emile Zola, The Living Library (Cleveland and New York: The World Publishing Company).

178. Michelangelo. Casa Buonarroti, Florence.

179. Michelangelo. *Last Judgment* fresco. Sistine Chapel.

180. José Clemente Orozco. *Top left,* mural, National Preparatory School, Mexico City. Collection of Alexander Dobkin. Edouard Manet. *Bottom,* Louvre, Paris.

181. Sandro Botticelli. Uffizi, Italy.

182. Honoré Daumier. *Top left,* Kapferer, Paris. J. A. Dominique Ingres. *Bottom left, bottom right,* Ingres Museum, Montauban.

183. J. A. Dominique Ingres. Painting. The Metropolitan Museum of Art, New York.

185. J. A. Dominique Ingres. The Metropolitan Museum of Art, New York.

186. Pablo Picasso. Collection of Kiki Dobkin, New York.

187. Pablo Picasso. Paul Rosenberg and Company, New York. Michelangelo. Royal Academy, Venice. Henri Matisse. Pierre Matisse Gallery, New York.

188. Rembrandt van Rijn. Fodor Museum, Amsterdam.

189. Rembrandt van Rijn. Paris. Franz Rederer. The Artists’ Gallery, New York, courtesy of Hugh S. Stix.

190–191. Auguste Rodin. Rodin Museum, Paris.

192. Honoré Daumier. *Top left,* Collection of Dr. Alfred Gold, Berlin. *Bottom left,* Esnault–Pelterie, Paris.

193. Honoré Daumier. The Metropolitan Museum of Art, New York.

196. Kaethe Kollwitz. Collection of Mr. Gordon Fox, Montreal. Photo courtesy Galerie St. Etienne, New York.

198. Tintoretto. Louvre, Paris.

199. Rembrandt van Rijn. Bayonne.

200. Michelangelo. British Museum, London. Paolo Uccello. Uffizi, Florence. Pablo Picasso. Brooklyn Museum, New York.

201. Georges Rouault. The Metropolitan Museum of Art, New York. Georges Seurat. Museum of Modern Art, New York. Pablo Picasso. Buchholz Gallery, New York.

202. P. P. Prud’hon. Collection of M. Laporte, Paris.

203. William Blake. The Metropolitan Museum of Art, New York. Coptic burial portrait. The Metropolitan Museum of Art, New York.

205. Moses Soyer. Collection of Alexander Dobkin.

206. Andrea del Sarto. Louvre, Paris.

207. George Grosz. Associated American Artists, New York. Reginald Marsh. Cranbrook Museum, Bloomington Hills, Michigan.

208. Rembrandt van Rijn. The Metropolitan Museum of Art, New York.

209. Chaim Gross. Collection of Alexander Dobkin.

210. Eugène Delacroix. Collection of Alexander Dobkin, New York. Georges Seurat. Museum of Modern Art, New York.

215. Philip Evergood. Collection of Alexander Dobkin, New York.

216. Chaim Gross. Collection of Alexander Dobkin. Moses Soyer. Collection of Alexander Dobkin.

218. Kaethe Kollwitz. Lithograph. Collection of Mr. and Mrs. Abe Lerner, Brooklyn, N. Y.

219. Eugène Delacroix. Collection of Mr. and Mrs. Alexander Dobkin, New York.

222. Jacob Epstein. Collection of Mr. and Mrs. Alexander Dobkin, New York.

223. Rembrandt van Rijn. *Top right,* British Museum, London.

224. Alexander Dobkin. Collection of Mabel Mount.

225. Pablo Picasso. Buchholz Gallery, New York. Auguste Rodin. Fogg Museum of Art, Harvard University. Rembrandt van Rijn. British Museum, London.

227. Rembrandt van Rijn. The Metropolitan Museum of Art, New York. Anders Zorn. The Metropolitan Museum of Art, New York.

228. Henri de Toulouse-Lautrec. Collection of Jakob Goldschmidt, New York.

229. Edgar Degas. Courtesy of Herbert L. Elfers, Durand-Ruel Galleries, New York. Jack Levine. Collection of Alexander Dobkin.

230. René Robert Bouché. Drawing. Reprinted from September 1st *Vogue*, copyright, 1946, The Condé Nast Publications, Inc.

236. Jean Antoine Watteau. *Top*, Louvre, Paris. *Bottom right*, Elreden Hall, Collection of the Earl of Iveagh.

238. Albrecht Dürer. Biblioteca Ambrosiana, Milan. Peter Paul Rubens. Altere Pinakothek, Munich. Francisco Goya. Der Schönen Kunste Museum, Budapest.

239. Marcel Vertès. Illustrations for *It's All Mental* (New York: The Tudor Publishing Company).

241. Benton Spruance. Frank K. M. Rehn Gallery, New York.

242. Dorothy Hood. Courtesy of Lord & Taylor, New York. Jane Turner. Courtesy of Saks-Fifth Avenue, New York.

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247. Carl Erickson (Eric). Drawing. Reprinted from March 15th *Vogue*, copyright, 1947, The Condé Nast Publications, Inc.

INDEX OF ARTISTS

Aphrodite of Cyrene

Bellows, George
Blake, William
Blumenfeld, Erwin
Bohrod, Aaron
Botticelli, Sandro
Bouché, Louis
Bouché, René Robert
Boucher, Francois

Calcar, Jan Stephan van
Castellon, Fredric
Cezanne, Paul
Cikovsky, Nicolai
Clouet, François
Corbino, Jon
Cranach, Lucas, the Elder

Dali, Salvador
Daumier, Honoré
David, Gerard
Degas, Edgar, *frontispiece*
Del Sarto, Andrea
Delacroix, Eugène
Dobkin, Alexander
Diirer, Albrecht

El Greco
Egyptian sculpture
Epstein, Jacob
Eric (see Erickson, Carl)
Erickson, Carl
Evergood, Philip

Fausett, Dean
Fredenthal, David

Ganso, Emil
Géricault
Gilbert, George
Girard, André

Glackens, William J.
Goya, Francisco
Grafström, Ruth Sigrid
Greek sculpture
Gross, Chaim
Grosz, George
Groth, John
Grünewald, Matthias
Guys, Constantin

Hokusai
Hood, Dorothy

Indian sculpture
Ingres, J. A. Dominique

John, Augustus

Kollwitz, Kaethe
Kroll, Leon
Kuniyoshi, Yasuo

Leonardo da Vinci
Levine, Jack

Maillol, Aristide
Manet, Edouard
Marsh, Reginald
Matisse, Henri
Messerschmidt, Franz Xavier
Michelangelo
Morrissey, Kathleen

Nefretete, Queen of Egypt
Newman, Arnold

Orozco, José Clemente

Pascin, Jules
Picasso, Pablo
Pollaiuolo
Poussin, Nicolas
Prud’hon, P. P.

RBW (*see* Willaumez, R. B.)
Raphael
Rederer, Franz
Reisman, Philip
Rembrandt van Rijn
Renoir, Pierre Auguste
Richer
Rodin, Auguste

Rouault, Georges
Rubens, Peter Paul

Schnakenberg, Harry
Seurat, Georges
Somerfeld, Margaret
Soyer, Moses
Soyer, Raphael
Speicher, Eugene
Spruance, Benton
Sternberg, Harry

Tintoretto
Toulouse-Lautrec, Henri de
Turner, Jane

Uccello, Paolo

Veronese, Paolo
Vertès, Marcel
Vesalius (*see* Calcar, Jan Stephen van)

Walkowitz, Abraham
Watteau, Jean Antoine
Willaumez, R. B.
Wilson, Sol

Young, Mahonri

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[1] For further details of the bone structure of the arms and legs, see “The Limbs,” page 47.